



Calhoun: The NPS Institutional Archive
DSpace Repository

Combating Terrorism Fellowship Program

CTX: Combating Terrorism Exchange

2017-05

CTX (Combating Terrorism Exchange), v.7:1

Naval Postgraduate School (U.S.)

Monterey, California: Naval Postgraduate School

Volume 7, No. 1, 2017

<http://hdl.handle.net/10945/53330>

This publication is a work of the U.S. Government as defined in Title 17, United States Code, Section 101. Copyright protection is not available for this work in the United States.

Downloaded from NPS Archive: Calhoun



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

Dudley Knox Library / Naval Postgraduate School
411 Dyer Road / 1 University Circle
Monterey, California USA 93943

<http://www.nps.edu/library>

CTX

Volume 7, No. 1 2017



ISSN 2162-6421 (online)
Spring 2017

EDITORIAL STAFFMICHAEL FREEMAN *Executive Editor*ANNA SIMONS *Executive Editor*ELIZABETH SKINNER *Managing Editor*RYAN STUART *Design & Layout***EDITORIAL REVIEW BOARD**

VICTOR ASAL

University of Albany Suny

CHRIS HARMON

*Asia-Pacific Center for
Security Studies*

BLAIRE HARMS

US Naval Postgraduate School

TROELS B. HENNINGSSEN

Royal Danish Defense College

PETER MCCABE

Joint Special Operations University

IAN C. RICE

US Army

NICHOLAS TOMB

US Naval Postgraduate School

CRAIG WHITESIDE

*US Naval War College***From the Editor**

Welcome to the Spring 2017 issue of *CTX*. Our production process has gone through some changes over the last two quarters, and we will publish fewer issues in Volume 7 (2017) than in previous years. That does not mean, however, that the quality of the articles and columns we publish will be affected in any way, except as we continually try to improve the journal based on what you, our readers, tell us about what you want to read. We've gotten quite a bit of feedback on the November 2016 special issue (Volume 6, number 4), which was devoted to the topic of hybrid warfare and how the NATO alliance should prepare to respond when members are threatened by means other than armed force. We'd love to hear from you at CTXeditor@GlobalECCO.org or on Facebook whenever you read something in *CTX* that sparks your interest, raises questions, or demands a response. After all, you're the reason we publish *CTX*.

The first article in this issue comes from Vera Mironova, in collaboration with Mohammed Hussein, based on her firsthand observations in Iraq and personal interviews with former ISIS members. Mironova is a terrorism expert whose research focuses on the ways in which terrorist groups organize their labor requirements. Here she describes how the decline in ISIS's fortunes is forcing the group to turn to imprisonment and coercion to man its frontlines and keep its war machine running.

The next two articles examine terrorism in the maritime domain. First is Paul Shemella's discussion of the potential for terrorist activity in and around the Mediterranean Sea by al Qaeda, ISIS, and their supporters. Many observers warn that as the fighting across Syria and Iraq turns against ISIS, and as the Caliphate project crumbles, extremists will look for ways to retaliate against "soft" targets through acts of terror. Shemella examines a multitude of vulnerabilities in the Mediterranean region, from shipping, transport, and tourism, to oil production and port operations. With the addition of the refugee crisis and the rise of anti-EU nationalism, European governments are finding it increasingly difficult to cooperate on finding solutions.

The second of our maritime articles deals with the rising danger posed to critical port facilities by unmanned aerial vehicles (UAVs, or "drones"). Port security expert John Caton uses an analytical tool developed by the US Coast Guard to evaluate the threat that drones pose to port operations, based on the actual

profile of a major port on the US West Coast. Although his discussion of possible countermeasures draws on the security and legal environment in the United States, Caton's analysis could be adapted to major ports in most of the world.

Next, Jonathan Nagle explores the similarities between ISIS and the American millennialist Christian sect called the Branch Davidians. When the Davidians began stockpiling arms, US law enforcement agencies ignored advice from experts who urged them to take their time to understand the group's motivations. The result was a tragedy that, Nagle warns, is being repeated on a global scale by the West's failure to understand the influence of Salafist millennialism on ISIS's leaders and followers.

The final article, by Anders Westberg, describes the rapid rise of violent criminal motorcycle gangs in Sweden, and the struggle of the Swedish polity to adapt its laws—and attitudes—to confront this expanding threat.

We have two CTAP interviews for you in this issue. In the first, Vera Mironova delves further into her research on how ISIS is managing its labor force as the wars in Syria and Iraq turn against it. With the ideologues dead, the conscripts running away, and no more money to lure mercenaries, how can the ISIS human resources division keep the ranks filled? The second interview is with Bruce Hoffman, who has been researching and writing on a wide range of terrorism-related topics since the late 1970s. He and interviewer Michael Freeman explore the reasons why terrorism persists as a useful tool for political outsiders despite claims that "it doesn't work." They also discuss what distinguishes today's terrorist organizations from their historical predecessors and whether the US-led military coalition that is fighting ISIS has learned anything from its past experience with al Qaeda (the answer, according to Hoffman is "no").

In the Ethics and Insights column, George Lober asks readers to ponder the importance of honor and truth and the role of the "silent professional" in military culture. As he has done in all of his columns for *CTX* over the years, Lober zeroes in on the moral and ethical paradoxes that military service presents to the people who fight for their country. Lober recently retired from teaching at the US Naval Postgraduate School but promised he would continue contributing to *CTX* as his writing schedule allows. His ethics columns have been a highlight of this journal since its founding, and we intend to hold him to that promise.

Our book review comes from Fatih Celenay, who discusses David Kilcullen's book *Out of the Mountains: The Coming Age of the Urban Guerrilla*. And in the Publications section, you will find a number of new titles from the Joint Special Operations University to peruse.

We encourage you again to send your article submissions, comments, and questions to CTXeditor@GlobalECCO.org. You can follow *CTX* and join in discussions with your fellow readers on Facebook at Global ECCO. We look forward to hearing from you.

ELIZABETH SKINNER

Managing Editor, *CTX*
CTXeditor@globalecco.org

Inside This Issue

Letter from the Editor ELIZABETH SKINNER

- 5 ISIS Prisons: Where Labor Demand Meets Labor Supply
VERA MIRONOVA, BELFER CENTER FOR SCIENCE AND
MOHAMMED HUSSEIN, IRAQ OIL REPORT
- 11 Maritime Terrorism in the Mediterranean Sea
CAPT PAUL SHEMELLA, US NAVY (RET.)
- 21 Drones and the Future of Security Policy: A Maritime Case Study for Assessing the
Risk of Small Unmanned Aircraft Systems
JOHN J. CATON, THE CADMUS GROUP
- 34 Fundamentalism: The Branch Davidians and the Islamic State
MAJ JONATHAN NAGLE, US ARMY
- 39 Adapting CT Strategies to Combat Organized Crime Gangs
MAJ ANDERS WESTBERG, SWEDISH SPECIAL OPERATIONS COMMAND
- 51 THE CTAP INTERVIEW
Vera Mironova, Belfer Center for Science and International Affairs
INTERVIEWED BY DOUG BORER, US NAVAL POSTGRADUATE SCHOOL
- 57 THE CTAP INTERVIEW
Bruce Hoffman, Georgetown University
INTERVIEWED BY MICHAEL FREEMAN, US NAVAL POSTGRADUATE SCHOOL
- 67 ETHICS AND INSIGHTS
Honor and Truth
GEORGE LOBER, US NAVAL POSTGRADUATE SCHOOL
- 71 THE WRITTEN WORD
Out of the Mountains: The Coming Age of the Urban Guerrilla by David Kilcullen
REVIEWED BY FATIH CELENAY
- 74 PUBLICATIONS

ABOUT THE CONTRIBUTORS

Dr. Doug Borer is an associate professor of Defense Analysis at the US Naval Postgraduate School (NPS), in Monterey, California. He earned his PhD in political science from Boston University in 1993. Dr. Borer's academic postings include the University of the South Pacific, the University of Western Australia, Virginia Tech, the Universiti Kebangsaan Malaysia, and the US Army War College. In 2007, he co-founded (with Dr. Nancy Roberts) the Common Operational Research Environment (CORE) Lab at NPS. In 2011, he and Dr. Leo Blanken created the Combating Terrorism Archive Project (CTAP).

John J. Caton works in the Homeland Security sector of the Cadmus Group, where he presently supports the Federal Emergency Management Agency's Doctrine and Policy office. He aided the California Office of Emergency Services in the development of its California Situational Reporting Guide and assisted the City of Los Angeles's Emergency Management Department to develop its highly regarded Medical Supply Chain Resiliency Plan. He earned his master's degree in public administration from the University of Southern California.

Fatih Celenay graduated from Maltepe Military High School, Izmir, Turkey, in 2005. He then attended the Turkish Army Academy and graduated as a second lieutenant in August 2009. He served with the Turkish Land Forces and was assigned to the Turkish Special Forces Command (SOCOM) in 2013, where he remained until he left military service in mid-2016. In 2015, Celenay graduated from the US Army Special Forces Qualification Course, and studied in NPS's Defense Analysis Department in 2016.

Dr. Michael Freeman is an associate professor of Defense Analysis at NPS, where he joined the faculty in 2005. Dr. Freeman's research interests include terrorism and democracy, terrorist financing and counterterrorism policy, international security, and US foreign policy. In 2014, he won the Richard W. Hamming award for excellence in teaching. Dr. Freeman developed and leads the Global ECCO (Education Community Collaboration Online) project at NPS and is an executive editor of *CTX*.

Dr. Bruce Hoffman is currently the director of the Center for Security Studies, the director of the Security Studies Program, and a tenured professor at Georgetown University's Edmund A. Walsh School of Foreign Service, Washington, D.C. Dr. Hoffman previously held the corporate chair in counterterrorism and counterinsurgency, as well as several other senior positions at the RAND Corporation. He serves in a number of positions at governmental and civilian academic and research institutions, and is editor-in-chief of the journal *Studies in Conflict and Terrorism*. He is the author of numerous books, including *Inside Terrorism* (Columbia University Press, 1998; revised edition, Columbia University Press, 2006) and most recently, *Anonymous Soldiers: The Struggle for Israel, 1917–1947* (Knopf, 2015).

Mohammed Hussein is the deputy Kurdistan bureau director at *Iraq Oil Report*, where he has worked as a journalist since 2003. He is also a research fellow at the Center for Development and Natural Resources, American University of Iraq. His journalism has focused particularly on the armed groups operating in Iraq. Before joining *Iraq Oil Report*, Hussein was an editor at *Avena*, the only independent newspaper in Iraq at the time. He is co-founder of the independent local newspaper *Barawshar* and an independent radio station, Dang. Hussein's

investigative reports, commentaries, and articles about Iraqi politics have appeared in various Iraq media and in the journal *Foreign Affairs*.

George Lober retired in 2016 after 17 years at NPS guiding US and international military students through the challenging terrain of civilian/military ethics and critical thinking. He earned his BA and MA in English from the California State University system and has published in the journals *Eclectic Literary Forum* and *Red Wheelbarrow*. Lober became interested in the study of ethics in 1998 through a reacquaintance with both philosophy and critical thinking, and joined the faculty of NPS in 1999.

Vera Mironova is a research fellow in the International Security Program at the Belfer Center for Science and International Affairs, Kennedy School of Government, Harvard University, and a PhD candidate in political science at the University of Maryland. Her research explores individual-level behavior in conflict environments. She is currently examining the labor market for rebel recruitment in the Syrian civil war through first-person surveys of fighters on the front lines. Mironova's fieldwork has also taken her to conflicts in Yemen, Iraq, Ukraine, the Democratic Republic of Congo, Kosovo, Croatia, and Bosnia. She is a regular contributor to *Foreign Affairs*, and her writings and commentaries have appeared in a number of prominent journals.

Major Jonathan Nagle is an active duty logistics officer in the US Army. He received both a commission and a BA degree in international studies from the Virginia Military Institute in 2006. MAJ Nagle has served in both conventional and special operations units at Fort Richardson, Alaska, and Fort Carson, Colorado. His combat tours include Iraq, Afghanistan, and Kuwait, with over 36 combined months in theater. MAJ Nagle is currently pursuing an MS degree in Defense Analysis from NPS.

Captain Paul Shemella retired from the US Navy at the end of 1996 after a career in Special Operations, where he planned and executed counterterrorism and counternarcotics operations in Latin America, Europe, and other regions. He earned a master's degree in National Security Affairs at NPS and was a senior fellow at the Kennedy School of Government at Harvard University. CAPT Shemella joined NPS's Center for Civil-Military Relations in 1998, where he remained until his retirement in 2015. He is the editor and principal author of *Fighting Back: What Governments Can Do about Terrorism* (Stanford University Press, 2011) and *Global Responses to Maritime Violence: Cooperation and Collective Action* (Stanford University Press, 2016).

Major Anders Westberg teaches and serves as the Swedish Special Operations Command's SOF chair at the Swedish Defence University in Stockholm. MAJ Westberg is a SOF operations and intelligence officer with multiple international deployments, predominantly to the Balkans, and also four operational tours to Afghanistan. In 2005 and 2006, MAJ Westberg worked as the head of the Criminal Intelligence Department of one of Sweden's County Civilian Police agencies. He earned a master's degree from the NPS Defense Analysis Department in 2016. He is also a distinguished graduate of the USMC Command and Staff College.

COVER PHOTO

Cover image courtesy of ISIS propaganda video.

TERMS OF COPYRIGHT

Copyright © 2017 by the author(s), except where otherwise noted. The *Combating Terrorism Exchange* journal (*CTX*) is a peer-reviewed, quarterly journal available free of charge to individuals and institutions. Copies of this journal and the articles contained herein may be printed or downloaded and redistributed for personal, research, or educational purposes free of charge and without permission, except if otherwise noted. Any commercial use of *CTX* or the articles published herein is expressly prohibited without the written consent of the copyright holder. The copyright of all articles published herein rests with the author(s) of the article, unless otherwise noted.

DISCLAIMER

This journal is not an official DoD publication. The views expressed or implied within are those of the contributors and do not necessarily reflect the views of any governmental or nongovernmental organization or agency of the United States of America or any other country.

ISIS Prisons: Where Labor Demand Meets Labor Supply

Vera Mironova, Belfer Center for Science and International Affairs, and Mohammed Hussein, Iraq Oil Report

ARMED GROUPS RELY ON VARIOUS TYPES OF LABOR RESOURCES.¹ Among these laborers are people who are dedicated to the goals of the group, people who are only interested in immediate profit, and people who don't want anything to do with the work or the war, but have no choice—those who are forced to labor. Forced labor is the least preferable source of labor for any armed group, but as ISIS recently started losing its war in Iraq and its financial resources, it was faced with fewer labor supply options and greater demand for labor. Prisoners, ISIS found, were a good way to meet the demand, and the group now uses prisoners for both intellectual work in the chemical labs and hard labor in its sophisticated tunnel system.

Sophisticated Engineering

In July 2016, ISIS began construction of a pipeline from Iraq's Qayyarah oil fields to the Tigris River. The plan was to mix crude oil into the water and let it flow downstream, where it would accumulate around a temporary plastic bridge built by the Iraqi Army. The oil would then be set on fire, effectively melting the bridge and putting it out of service. Fortunately, coalition airstrikes thwarted the would-be disaster, but the existence of the plan shines light on a disturbing fact. This pipeline was not the brainchild of uneducated terrorists. It took knowledge and skill. It took expertise.

The pipeline is just one example of the more complicated tactics emerging from the ISIS corner in recent times. The group has also managed to produce chlorine gas, which it used extensively against Kurdish and Iraqi forces; successfully operate oil refineries; and construct a deep underground tunnel network with its own airflow system. These activities prompt the question: how are ISIS guerilla fighters developing and executing such sophisticated operations?

A survey of ISIS member profiles, including its leadership, reveals that few, if any, ISIS personnel are even remotely capable of designing or implementing such projects.² They have neither the education nor the necessary experience in the necessary fields.³ Furthermore, very few of the former Baath Party members who joined ISIS would do this kind of work because they are more concerned with getting promotions than advancing science. Could the engineers and scientists ISIS is using be from among the foreign fighters who have joined the cause? Probably not. Many of these fighters lack even a secondary school diploma and are more interested in having four wives than in developing military stratagems. The planners behind these complex operations are also unlikely to come from among the locals who joined for money and power because if they had those kinds of skills, employment by ISIS would not be their only way to earn money.

It's not that ISIS hasn't tried to recruit from among the educated and professional classes. In 2014, the group was producing highly professional advertisements to recruit doctors and spreading the word through their social media networks that they wanted

**PRISONERS, ISIS
FOUND, WERE
A GOOD WAY
TO MEET THE
DEMAND.**

*All photos this article courtesy of
Vera Mironova.*

to hire engineers at a good salary.⁴ But that strategy didn't seem to work. For most skilled professionals, working for ISIS isn't on their list of career objectives.

Professional Prisoners

So how is ISIS getting the people it needs? It is acquiring them by making them prisoners, a practice that is widespread in ISIS-controlled parts of Iraq.⁵

There are three types of ISIS prisoners. First are members of ISIS who have violated its rules, for example, getting caught smoking or not showing up for mandatory prayer. Although these kinds of offenders are usually sentenced to public lashing (for propaganda purposes), prison is also a viable option. Second are those whom ISIS considers dangerous or who are accused of cooperating with the enemy. These people are usually sentenced to death. The third category of prisoners consists of those whose only crime is being good at what they do. These are the “on-demand” prisoners, skilled professionals and laborers ISIS extorts for its own purposes. And every ISIS official, even at the lowest rank, has the authority to conduct arrests.

Engineers of various kinds are in high demand. Petroleum-sector engineers are sent to work in oil refineries, mechanical engineers are made to assemble car bombs, and military engineers are typically used to train ISIS members. As soon as ISIS entered the Iraqi city of Mosul in mid-2014, it was in desperate need of oil tanker trucks and drivers.⁶ At the time, ISIS had the money to pay tanker drivers—and coalition airstrikes were not as intense—so the group was able to hire the people it needed. After a year, however, the tanker drivers' pay decreased because ISIS lost control of several oil fields in Salahadin and south of Kirkuk. Oil tankers also became direct targets for US-led coalition warplanes. Lack of payment and increased risk made drivers avoid working in ISIS-held territories in Iraq. In response, ISIS simply forced tanker operators who owned their trucks to work by putting them in jail on fake charges. ISIS negotiated with the imprisoned owner-operators: they could drive their own tankers for ISIS for a specified amount of time in exchange for their freedom.

Once this problem was solved, ISIS needed construction equipment, so it arrested the owner of a construction company in Mosul on nonsense charges. After keeping him in jail for several days and torturing him, ISIS freed him in exchange for the use of his company's machines, shovels, and excavators. It was a hostage-deal situation. The contractor was allowed to live with his family in Mosul, but his company was used by ISIS militants. ISIS gave him a little money to maintain the machines and pay his machinery operators.⁷

Military engineers are especially helpful because of their expertise in sophisticated weaponry, but they are relegated to the training camps because they cannot be trusted on the front lines. That may have something to do with the way they were recruited. In an interview, one man described his family's situation.

My dad was a brigade leader in the Iraqi Army's 5th division. ISIS arrested him without any reason in early 2015, in front of our house. After several days, a local ISIS leader informed us that my dad had been sentenced to death. Two months later, we found out that my dad was still alive but had to train ISIS militants on using some advanced weapons. He has to do whatever ISIS wants from him.

“FOR MOST SKILLED PROFESSIONALS, WORKING FOR ISIS ISN'T ON THEIR LIST OF CAREER OBJECTIVES.”

In return, ISIS lets him and his family stay alive. If he declines to cooperate, ISIS would kill him and us.⁸

Another group of sought-after professionals for ISIS is scientists, with chemical engineers and physicists in particular demand. Those in Iraq are mostly professors from Mosul University, which lies in ISIS-controlled territory. The scientists and their laboratories at the university have been forcefully commissioned to develop more deadly chemical weapons for ISIS. Although these workers are more privileged than other prisoners and are allowed to spend their nights at home, they are under constant surveillance. They cannot escape, nor can they refuse to work for ISIS. According to one eyewitness, several chemical scientists in Mosul University who refused to work were killed on the spot in the laboratory, to serve as an example.

Medical doctors have also recently joined the ranks of professional prisoners. Because ISIS casualties are increasing, so is the demand for doctors. Although most doctors have never refused treatment to ISIS militants at the civilian hospitals, since the beginning of the campaign to retake Mosul in October 2016, many have been forced to work exclusively for the group on the front line.⁹ If ISIS asks a doctor to relocate to a field hospital and he refuses, he is arrested, sent to prison, and forcefully transferred to the field hospital. There he is treated well, but his movement and freedom are still restricted, and like the engineers, his family is kept under threat.

A Choice of Deaths

ISIS is also increasingly relying on prisoners to man its frontline positions. With the Iraqi Army and US-led coalition forces advancing and gaining more territory, ISIS is taking more and more casualties on its front lines, particularly in and around the contested city of Mosul. This is making it harder and harder for ISIS not only to entice fighters to volunteer for frontline combat, but even to make fighters follow orders to relocate to such places. For instance, around 2 August 2016, a firefight broke out among ISIS militants in a crowded Mosul market over occupation of the Bab al-Tub administrative office in central Mosul. Both groups wanted to stay in that peaceful neighborhood rather than go to the front line.

Similarly, ISIS was previously able to rely on volunteers to conduct suicide missions, but those fighters are for one-time use, and now the group seems to be running out of them. To both solve this problem and man the most dangerous frontline positions, ISIS must compel people against their will, including ISIS militants who were sentenced to death, perhaps for spying or from *takfiri*—a practice of excommunication by which one Muslim declares another Muslim to be a *kafir*, a non-believer. ISIS leaders regularly accuse members who do not agree with the leadership of being *kafir*.¹⁰ Such prisoners are often given the option of either being executed immediately or being sent to whichever is the most dangerous frontline at the time—a choice that most likely also means a quick death. In this way, ISIS not only mans the most undesirable positions, but it also eliminates people who disagree with group policies and who could potentially destabilize the group. “Definitely this front line is where ISIS punishes its militants by forcing them to stay. I heard that they sent punished militants from Syria to here,” noted Dlshad Mala, a Peshmerga battalion leader in the south of Kirkuk.¹¹

“PRISONERS ARE GIVEN THE OPTION OF EITHER BEING EXECUTED IMMEDIATELY OR BEING SENT TO THE MOST DANGEROUS FRONT LINE.”



An ISIS training camp and living base in a Mosul neighborhood



Before ISIS took it, it was a very fancy private house.



Dining hall in the training camp



Documents and even a cell phone were left.

A Street to Prison to Tunnels Pipeline

In addition to highly-educated professionals and disposable fighters, strong young men capable of performing hard labor in Iraq's notoriously hot weather are also in demand. Since ISIS has come under constant attack by the US-led coalition, it has been forced to take defensive positions. Its fighters have started digging tunnels on the front lines to hide from airstrikes and move between positions unnoticed by drones. In addition to engineering experts, the tunnels require unskilled manpower in large quantities, especially because ISIS kills, on the spot, anyone who is not doing his job well: Peshmerga personnel reported finding mass graves near major tunnels.¹² And when ISIS runs low on manpower, no problem. If there is a demand from headquarters, there will be a supply from the prison system.

At first, ISIS was using the "human resources" it already had in its prisons, even bringing condemned convicts overnight from as far away as Fallujah to the Mosul front lines.¹³ Many of these prisoners were made to dig tunnels as punishment for violations inside the prison. One person imprisoned in an ISIS jail recalls his cellmate's punishment of digging five meters of a tunnel without rest for insulting a guard. Peshmerga Colonel Said Omer added, "As far as we know ... a rotation for prisoner groups on the digging site is a week. ISIS brought them to work in the tunnels for a week and then took them back to their jails."¹⁴ But the prisons' existing labor supply was eventually depleted. To meet the constantly rising demand for labor, ISIS increased its supply of prisoners by modifying its imprisonment rules. And where could they find young, physically fit males for such a purpose? The enemy armed forces.

When ISIS first took control in parts of Iraq, it asked captured members of the Iraqi military and police force to sign a *tawba* (declaration of repentance) saying, "I withdraw from the sin of joining army/police forces. I stop working for them and declare my regret to God." Anyone who signed was then released. Officers usually signed, but soldiers were not sure if they had to, and many did not. When the demand for labor arose, ISIS went back to its lists and arrested everyone who had not signed a *tawba*. They even arrested some who had. This allowed ISIS to continue tunnel construction without delays.¹⁵

ISIS has also used prison laborers to clean up the destruction caused by coalition bombings. Near Qayyarah, a small town south of Mosul, some oil fields were targeted many times by coalition warplanes. During the night, ISIS brought prisoners in to clean up the mess that the day's airstrike had caused, according to an employee of Iraq's state-owned North Oil Company (NOC) who works in the Qayyarah fields and still lives in the area:

ISIS used to bring the prisoner-laborers during the nights, but more than four times I encountered them while working in the fields. I saw the workers during daytime, as they could not finish their task on time and stayed in the fields until late morning. There were some ISIS militants guarding the workers, who are more than 100 laborers. I was not allowed to interact with them. We just assumed that they were prison-laborers.¹⁶

After each airstrike, ISIS launched a huge cleanup effort because it desperately needed the oil and its revenue. The majority of NOC workers fled to Baghdad

and Kurdistan, so ISIS had to fill this gap with prison labor. A local who still lives in the area reported that

the prison laborers used to work definitely like robots. They were very calm, sad, and slowly functioning. They had no normal chat and interaction while working, as any normal labor force would. Some of them could not do their jobs well and had physical disabilities. They looked like ill and wounded people.¹⁷

The Prisoner to Housemaid Pipeline

For domestic help, ISIS targets women traveling through ISIS-controlled territories. These may be Syrian refugees from Damascus or women from Daraa fleeing to Turkey through Palmyra or Basra. A woman is first stopped “for an investigation,” and if she is traveling alone—which is an ISIS violation—she is arrested and forced to work in an ISIS member’s home. Although she may be working in the house of one of the fighters instead of being thrown into prison, the work is still hard, the door is still closed from the outside, and she is not allowed to go out. The only thing that can save a woman from such forced labor is agreeing to marry one of the fighters.¹⁸

Conclusion

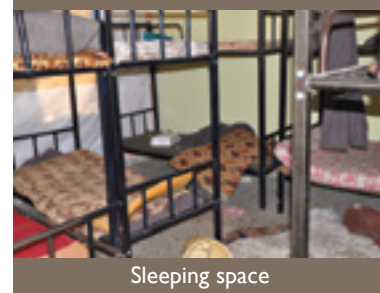
By such widespread use of forced—essentially slave—labor, ISIS joins the ranks of regimes like Hitler’s Germany and Stalin’s Russia, among many others, which found themselves unable to meet constantly increasing labor demands for wartime, industrialization, and agriculture. The key differences between ISIS and those regimes are that, first, ISIS is controlling a much smaller territory, and as a result, the available forced labor is not sufficient for its needs; and second, because of the conditions in Iraq before ISIS’s rise, there is a big difference in the quality of those labor resources. Both Germany during the Third Reich and the USSR under Stalin had highly developed scientific research sectors and some of the world’s best-known academics in war-applicable fields such as chemistry and physics, and particularly in engineering. In Iraq, by contrast, academia and scientific research were destroyed by previous wars, while everyone who was internationally competitive either left the country or was killed.¹⁹ (This could help explain why ISIS uses chlorine gas, a type of chemical weapon that originated back in WWI.) Dr. Mohammed Wajih, a former agriculture professor who worked at Mosul University for 20 years, explains:

The academic community and scientific research at Mosul University are not developed. Labs and scientific instruments in the university are too old, dating back to 1980, when the Iraq-Iran war started, and Iraq stopped investing in the universities. Lack of any interaction between the academic community, industrial projects, and businesspeople left professors with little scientific knowledge. It was also forbidden to teach theoretical materials related to anything that could be used in wars. And there are very few facilities that could be used to produce materials needed for war and weaponry.²⁰

Understanding the complicated human resources problems of ISIS and other insurgency groups helps their opponents develop better tactics for fighting them. If we know that we are fighting people who do not want to fight us in the first



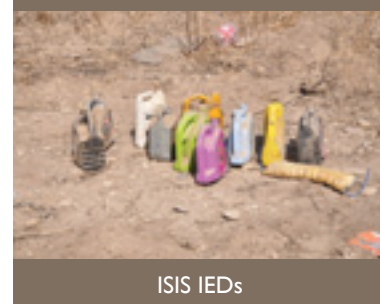
ISIS base – entrance to the tunnels



Sleeping space



ISIS drones



ISIS IEDs

place, such as the forced labor pool that ISIS is now sending to the front lines, then instead of trying to defeat them, we need to help these men and women pass intelligence to us, defect to our side, or even sabotage the terrorist group from inside. By lumping all ISIS fighters and workers under the heading of “violent extremist,” we may be killing people who can help us. ❖

ABOUT THE AUTHORS

Vera Mironova is an International Security Fellow, Belfer Center for Science and International Affairs, Harvard Kennedy School.

Mohammed Hussein is deputy director of the Kurdistan Bureau at *Iraq Oil Report*.

Copyright 2017, Vera Mironova and Mohammed Hussein. The US federal government is granted for itself and others acting on its behalf in perpetuity a paid-up, nonexclusive, irrevocable worldwide license in this work to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the US federal government. All other rights are reserved by the copyright owner(s). Foreign copyrights may apply.

NOTES

- 1 This article is based on Vera Mironova's experiences during six months of fieldwork on the Mosul and Kirkuk front lines in Iraq, while embedded with the Kurdish Peshmerga and Iraqi Special Operations Forces.
- 2 This information was gathered from open internet sources by the authors.
- 3 Brian Dodwell, Daniel Milton, and Don Rassler, *The Caliphate's Global Workforce: An Inside Look at the Islamic State's Foreign Fighter Paper Trail* (West Point, N.Y.: Combating Terrorism Center at West Point, 2016): <https://www.ctc.usma.edu/posts/the-caliphates-global-workforce-an-inside-look-at-the-islamic-states-foreign-fighter-paper-trail>. According to ISIS's internal recruitment records, a plurality of foreign fighters indicated education at the high school level, and a very small number had prior military experience.
- 4 A. Agron, “Wanted: Western Professionals to Join the Islamic State (ISIS),” *MEMRI, Inquiry & Analysis Series No. 1159*, 15 May 2015.
- 5 Interview with an escaped ISIS prisoner, Erbil, Iraq, August 2016; interview with Said Omer, Peshmerga officer on Khazr front line (about 20 kilometers east of Mosul, Iraq), August 2016.
- 6 In August 2014, ISIS controlled six major oil fields in Iraq: Alace and Alam in Salahadin Province; and Qayyarah, Humam Alil, Kask, and AinZala in Nainewa Province.
- 7 Interview with a relative of the business owner, Kirkuk, Iraq, August 2016.
- 8 Phone interview, Mosul, Iraq, August 2016.
- 9 In addition to numerous neighborhood clinics and hospitals, there are five major hospitals in Mosul (Salam, Batul, Khansa and Mosul, and a children's hospital), in addition to numerous local neighborhood clinics and hospitals.
- 10 It was reported that a Tajik foreign fighter who disagreed with the group's use of religion for their own purposes and who started conducting his own religion classes and lectures for ISIS members was accused of being a *kafir*. Ekaterina Sergatskoga, “The Story of an Ex-ISIS Militant Living in Ukraine” [in Ukrainian], Hromadske, 3 August 2016: <http://hromadske.ua/posts/rozpovid-eks-boiovyka-islamskoi-derzhavy-iakyi-zhyve-v-ukraini>
- 11 Interview with Dlshad Mala (a Peshmerga battalion leader), Kirkuk, Iraq, August 2016.
- 12 Interview with Colonel Said Omer (Zeravani Peshmerga forces), east of Mosul, Iraq, August 2016.
- 13 The author goes into more detail about the human resource problems faced by terrorist organizations in her CTAP interview with Michael Freeman in this issue.
- 14 Interview with Colonel Said Omer (Zeravani Peshmerga forces), east of Mosul, Iraq, August 2016.
- 15 Phone interview with a civilian in ISIS-controlled Mosul, Iraq, August 2016.
- 16 Phone interview with a civilian who works in Qayyarah Refinery in Iraq, August 2016.
- 17 Phone interview with a civilian who works in Qayyarah Refinery in Iraq, August 2016.
- 18 Phone interview with a Syrian refugee in France, August 2016.
- 19 Don Peck, “The Long Tradition of Killing Middle Eastern Nuclear Scientists,” *Atlantic*, 12 January 2012: <https://www.theatlantic.com/international/archive/2012/01/the-long-tradition-of-killing-middle-eastern-nuclear-scientists/251338/>
- 20 Phone interview with Dr. Mohammed Wajih in Turkey, August 2016.

Maritime Terrorism in the Mediterranean Sea

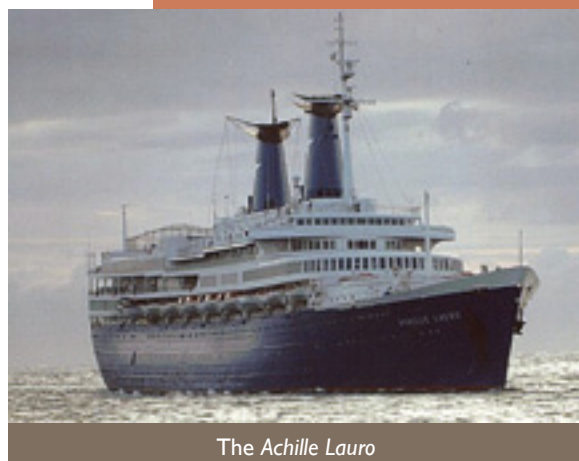
CAPT Paul Shemella,
US Navy (Ret.)

SERVING AS THE CROSSROADS OF THREE CONTINENTS, THE MEDITERRANEAN Sea has carried warships, commerce, and culture since the dawn of civilization.¹ It was at the very center of the ancient Western world and enabled the earliest surges of globalization. In the twenty-first century, the Mediterranean still makes it possible for much of the world to share the benefits of human development, but it also conveys the consequences of insecurity. Refugees from war and migrants seeking a better life (and criminals exploiting both) ply its waters day and night, creating a host of security issues for the region's governments. The imperatives of traditional maritime security, pitting empires and superpowers against each other, have been replaced by circumstances that compel European governments to cooperate in the pursuit of human security for people on the move, and for their own citizens.² The origins of and statistics about this human tide are well documented. This article evaluates the vulnerability of European societies to terrorist activity on and from the Mediterranean Sea as a consequence of the current refugee and migrant crisis.

Since 1985, the hijacking of the Italian cruise ship *Achille Lauro* by four Palestinian gunmen has been the emblem of maritime terrorism in the Mediterranean region. The conventional wisdom was (and still is, to some degree) that terrorists wishing to attack Europeans would launch those attacks from European soil rather than accept the operational risks associated with maritime operations. The flow of refugees and migrants from the Middle East and North Africa into Europe, coupled with relative freedom of movement *within* much of Europe, has reinforced the notion that terrorists will continue to exploit European security weaknesses ashore. The Paris attacks of November 2015 seemed to support this theory until it was discovered that at least one of the terrorists may have entered Europe by sea via a refugee center on the Greek island of Leros.³ As European border protection authorities attempt to seal off eastern approaches, the rise of ISIS's influence in Libya is focusing attention on a reemergence of the central Mediterranean as a route for terrorist operatives to reach Europe.⁴

People's conception of maritime terrorism has expanded with the new century. In the aftermath of 9/11, the mayor of Boston banned the entry of liquid natural gas (LNG) tankers into the port for three weeks, fearing the ships could be used as floating bombs to attack the city.⁵ Within weeks of the 9/11 attacks, an Egyptian man, thought to be a member of al Qaeda and carrying airport maps and security passes, was discovered living in a shipping container bound for Canada.⁶ Attacks on the USS *Cole* (2000) and MV *Limburg* (2002) in Yemen caused American and French authorities to examine the vulnerabilities of ships both in port and at sea more thoroughly.⁷ In 2004, the Philippine Abu Sayyaf terrorist group effectively sank *SuperFerry 14* with only a small amount of explosive placed inside a television set.⁸ The Mumbai attacks of 2008 added two more dimensions to the image of maritime terrorism:

PEOPLE'S
CONCEPTION
OF MARITIME
TERRORISM
HAS
EXPANDED
WITH
THE NEW
CENTURY.



The Achille Lauro



USS Cole

the potential for using ship hijacking as a means to infiltrate maritime terrorists into a target location and the extreme vulnerability of port cities to terrorists coming from offshore.⁹ A catastrophic accidental explosion aboard the *Deepwater Horizon* oil platform in the Gulf of Mexico in 2011 and its devastating environmental impact caused terrorism experts to consider the destructive potential and environmental hazard of deliberate attacks on such infrastructure.¹⁰ In 2013, Malaysian insurgents attacked the towns of Zamboanga City and Lahad Datu using dense maritime traffic in the Sulu Sea to mask their tactical approaches.¹¹ Using a surface-to-surface missile, small boats from Yemen's Houthi militia destroyed a high-tech logistics ship belonging to the United Arab Emirates while it was underway near the Bab al-Mandab Strait in October 2016. This attack could presage other such operations in the Mediterranean.¹²

Mediterranean Targets

The Mediterranean Sea and its long littoral are expansive enough to contain a limitless supply of potential targets but compact enough to make most of them vulnerable to acts of terrorism. Maritime commerce is literally the lifeblood of the Mediterranean economy, while tourism adds significant revenue to most state coffers. Cruise ships carrying thousands of passengers to port cities near zones of conflict are difficult to sink but relatively easy to hijack.¹³ The Mediterranean passenger ferry network is dense, connecting countries and cities on the sea's rim as well as its myriad islands.¹⁴ Ferries are not difficult to sink, and the 1994 *MS Estonia* and 2014 *Sewol* disasters reminded European officials that these ferries are dangerous even in the absence of deliberate attacks.¹⁵ Maritime-critical infrastructure is everywhere, and large cities have proliferated in the coastal zone. Crude oil carriers and liquefied gas tankers crisscross the sea, and petroleum pipelines line the shore. Recent uncertainty in the Middle East and Russia has prompted European nations to expand LNG facilities in the Mediterranean, and more are planned.¹⁶ With crowded beaches on all shores, the region is awash in human targets vulnerable to maritime attacks.¹⁷ Finally, the Mediterranean Sea, like all vast maritime spaces, provides terrorists with easy access to Europe through an environment that is largely ungoverned and very difficult to monitor.¹⁸

“TERRORISTS CAN RENT SAILBOATS AT NUMEROUS MARINAS THAT CATER TO THE INTERNATIONAL “BAREBOAT” VACATIONING SET.”

Attacking ships underway with small boats is a well-established tactic, tracing back to the Sea Tigers of Sri Lanka's Tamil Tigers insurgency in the 1980s.¹⁹ It is most effective when a target ship is in the process of transiting a choke point, especially if the ship has to slow down. A fast boat rigged with explosives could hide at one end of a narrow passage, leaping the distance to its target before the crew would be able to react. The Mediterranean passages that are most obviously vulnerable to this mode of attack include the Strait of Gibraltar, the Bosphorus, the Dardanelles, and the Suez Canal.²⁰ Others include the straits of Messina and Bonafacio, as well as the narrow channels separating mainland Turkey from the Greek islands of Lesbos, Chios, Leros, and Kos, where humanitarian operations at sea are ongoing. In a wide-ranging tourist economy, fast boats can be rented near the site of a planned attack. Terrorists can also rent sailboats at numerous marinas around the Mediterranean that cater to the international “bareboat” vacationing set.²¹ Rented boats can bring attackers ashore on remote beaches, away from airports and border checkpoints, perhaps to be met by accomplices already in place, affording them access to a wide variety of tactical objectives.

The Mediterranean region is a smorgasbord of targets for terrorists with maritime expertise. So, what explains the relative paucity of maritime terrorist attacks to date? The answer is complex, but to start with, terrorists are conservative by nature; they stay with what works. The abundance of European targets ashore—coupled with the poor track record of law enforcement—has focused the attention of most attackers on operations they can launch from hotel rooms and apartments. By contrast, maritime expertise is outside the normal skill set of even the most successful terrorist organization; anything that increases the already high risk of failure will be avoided. Moreover, maritime targets are often remote, lying beyond the effective range of the live media coverage that has become *de rigueur* for modern terrorism. There are, however, circumstances that may drive certain terrorist organizations to consider making maritime attacks a regular option, especially in the Mediterranean region.

First of all, successful maritime attacks in other regions provide “best practices” that can be duplicated elsewhere with some confidence. The wildly successful Mumbai attacks taught violent extremists everywhere that using the sea for infiltration is not really very difficult, especially for suicide missions. Properly trained terrorists wishing to attack cities and critical infrastructure along the Mediterranean coast can have it both ways: mayhem *and* live coverage.²² A second factor that could drive terrorists toward the sea is the improved counterterrorism measures now being applied by law enforcement authorities across Europe. The re-imposition of national border controls, as well as heightened scrutiny of migrants and refugees, has made traditional targeting more difficult. Terrorists, like lightning, take the path of least resistance. As European nations become more successful at blunting continental attacks, that path could become increasingly maritime.

One additional reason to expect maritime attacks is the emerging competition in brutality between al Qaeda and ISIS, now most prevalent in Africa.²³ Maritime attacks, especially against crowds and critical infrastructure, could raise the bar in a recruiting contest between the two organizations, which have suffered significant operational setbacks. The most extreme outcome would be the use of a nuclear weapon or radiological device (a “dirty bomb”), which would be delivered most easily from the high seas. European authorities must not allow the intense focus on continental security to blind them to what may be in store for the maritime realm. History teaches us that terrorist organizations become most violent and particularly creative as they begin to feel that they are losing.

Target Analysis

Let us assume that terrorist operatives acting for al Qaeda or ISIS, or some other group not yet on Europe’s radar, have decided to add maritime attacks in southern Europe to their operational portfolios. How would they determine which targets to select? Despite the abundance of targets, terrorist planners would want to maximize their return on financial and political investments. Even if terrorists are well-resourced, the specter of failure haunts them. In a competition for the allegiance of the young and the zealous, operational success must build upon operational success, while governments must be made to look weak and ineffective. In a bleed-to-bankruptcy strategic competition, terrorists can easily lose, because states, especially when they act together, have an enormous resource advantage.

“
TERRORISTS WISHING
TO ATTACK CITIES
ALONG THE COAST
CAN HAVE IT BOTH
WAYS: MAYHEM AND
LIVE COVERAGE.
”

To engineer a successful long-term campaign, any terrorist organization would have to use some kind of target analysis process.

What might the target analysis process for a terrorist organization look like? One way to imagine this would be to examine the process known as CARVER (criticality, accessibility, recuperability, vulnerability, effect, and recognizability), used by US SOF units. This acronym, now woven into the mentality of trained American saboteurs, breaks down into a series of judgments based on certain assessment criteria and the assignment of raw scores.²⁴ For terrorists, the same general methodology, modified for very different strategic objectives, would seem to offer an effective guide. With the benefit of experience—and some strategic imagination—the author has developed a putative terrorist target analysis model. Called CARVES, this tool is based on a list of assessment criteria similar to, but not the same as, the US SOF model.²⁵

“**TERRORIST ATTACKS ARE THE ULTIMATE “EFFECTS-BASED OPERATIONS.”**”

Criticality. From a terrorist perspective, the criticality of a target to the infrastructure system that serves people is significant but not crucial. In wartime, conventional forces would target such a system to deny the enemy some military advantage, but terrorists would be more interested in spreading fear through the population, and even a short-term blackout would accomplish that.

Accessibility. With their limited resources, terrorists must consider accessibility more than conventional armies need to. A government might be able to render a target so difficult to approach that terrorists decide to strike somewhere else—and there are always plenty of other targets.

Resilience. In the context of modern terrorism, “resilience” has come to mean more than just the time it takes to get a system back online. The term also assesses the time it takes for the people themselves to recover. Terrorists would consider both aspects of resilience, but the latter might dominate.

Vulnerability. Assuming terrorists can gain access to the target, vulnerability measures the ease with which the critical node(s) in a system can be taken out. Often a target will be vulnerable but inaccessible, or it can be accessible but largely invulnerable to destruction. Terrorists thrive on vulnerability; therefore, governments must work to reduce it for likely targets.

Effects. Terrorist attacks are the ultimate “effects-based operations.”²⁶ Terrorists want to create widespread public fear, and that fear can be amplified by random



acts of violence—even when the odds suggest there is little danger to individual citizens. Therefore, this assessment criterion should be one of the most important considerations in the terrorist target analysis process.

Symbolism. The target analysis process used by terrorists would have to include an evaluation of the potential target's symbolic value. Political statements are strengthened through symbolism, but how important is symbolic value relative to the other assessment criteria? That will depend on the threat group's strategic objectives.²⁷

One application of the CARVES assessment criteria is found in table 1. This depiction is a starting point from which to calculate the “attractiveness” of generic maritime targets to a known threat group. Specific targets can be substituted as more is known about terrorist intent, motivation, and methods. Panels of experts would have to be commissioned to adapt the table for a particular group and then to propose raw scores for each assessment criterion. The different weighting factors assigned to each criterion indicate that not all the assessment criteria have the same importance. The weighting factors suggested in table 1 can be modified according to the collective views of a panel of experts, but they are a good place to begin. Multiplying raw scores (1–10) by weighting factors (held constant for each assessment criterion) produces total scores that can be rank-ordered. The example shown in table 1 lists 10 generic Mediterranean targets to analyze in this way.²⁸

The notional values in this example tell us quite a bit about the experts who assigned them as well as the targets themselves. For instance, the consensus appears to be that crowds on beaches, LNG terminals, and other industrial plants ashore pose the greatest defensive challenges. The experts were clearly worried about passenger ferries. A more thorough examination illustrates the two prime sources of value for our analytical method: better resource distribution and deep thinking about what terrorists might be planning. The table (and the collective judgment it represents) is “possibilistic” rather than simply probabilistic, injecting experience and imagination into a government's planning efforts.

“ THE SUGGESTED
ANALYTICAL PROCESS
ENCOURAGES
OFFICIALS TO THINK
LIKE THE TERRORISTS
WHO MIGHT
TARGET THEM.”



Table 1: CARVES Table
Maritime Targets for Mediterranean Sea Region

Intended Target	Criticality (x3)	Accessibility (x5)	Resilience (x2)	Vulnerability (x5)	Effects (8)	Symbolism (7)	Total
Oil or Gas Tanker	(1-10) x 3	(1-10) x 5	(1-10) x 2	(1-10) x 5	(1-10) x 8	(1-10) x 7	?
Offshore Platform							
LNG Terminal							
Passenger Ferry							
Cruise Ship							
Cargo Ship in Port							
Cargo Ship Underway							
Industrial Plant Ashore							
Crowds Ashore							
NATO Warship Underway							

Using the Table:

1. Confirm list of generic Mediterranean targets
2. Assign/confirm weighting factors (x3, etc)
3. Assign raw scores
4. Multiply weighting factors times raw scores
5. Total each line-item
6. Compare total scores
7. List targets in order of attractiveness to specific terrorist organization
8. Repeat the process for specific Mediterranean targets
9. Use data generated to plan defensive strategies

Terrorists seeking tactical success must adhere to a planning cycle that calls for evaluating generic targets before analyzing specific ones. We should suppose that specific targets will be analyzed in similar fashion. Using the table for specific maritime targets in and along the Mediterranean Sea would indicate where governments—individually or collectively—might apply more (or fewer) resources and the highest (or lowest) levels of security.²⁹ No government can protect all potential targets simultaneously. Some system of “strategic triage” is needed to distribute precious resources in the defense against active terrorist threats. The suggested CARVES analytical process encourages responsible officials to think like the terrorists they believe might target them, and enables them to develop the most effective and efficient defensive strategies.³⁰

Tactics and Tradecraft

How might terrorists actually use the information gleaned from such an analytical process?³¹ Assuming the attackers can generate the capability to operate in a maritime environment—or contract their operations to pirates and smugglers who already have it—they have a rich menu from which to choose, first generally and then specifically, as shown in table 1. Using table 1 as a guide, we can list some of the targets terrorists might select to achieve their basic objectives of causing the most harm and creating widespread fear on Europe’s southern fringe.

Oil and gas tanker. Tankers carrying liquid or gas hydrocarbons to and from Mediterranean ports are vulnerable to hijacking, standoff weapons, and small

boats laden with explosives. Hijacked tankers could also be used to ram pier facilities, shoreside power plants, and coastal developments.

Offshore platform. Offshore energy platforms in the Mediterranean are prevalent, exposed, and increasing in number. Terrorists could easily approach these structures with recreational craft rented from local marinas. The platforms could be damaged with standoff weapons or by positioning non-threatening-looking boats loaded with explosives underneath the structure.

LNG terminal. Liquefied natural gas is transported between export terminals, where the gas is converted into liquid, and import terminals, where it is converted back into a gas. Both ends of this trade are vulnerable to standoff weapons, but the real threat would be ramming a ship—perhaps even an LNG tanker—into the facilities.

Passenger ferry. Terrorists using the refugee flow as a “cover for status” can easily board oceangoing ferries that connect Greek and Italian islands to mainland Europe. If they are able to smuggle explosives aboard or wear suicide vests, it would be possible for them to sink the ferries and kill large numbers of innocent people. Such an attack could be timed to coincide with leaving or arriving in a crowded port.

Cruise ship. The Mediterranean Sea is full of cruise ships treating tourists to the sights and pleasures of Western civilization. Although difficult to sink, they offer a symbolic target that—for those skillful enough to climb aboard from an assaulting boat—could be used as a mass killing field. After that, the ship could be used as a weapon to ram into another target.

Cargo ship in port. There are ships filled with hazardous cargoes in most European ports. Terrorists could gain access to these ports and ships unnoticed from small boats or by embedding themselves into shipping containers with false walls to hide them. Cyber systems can also be hacked to enable terrorists to control—and thereby smuggle—large amounts of explosive into proximity with volatile materials, causing widespread damage. Sinking a ship at the pier or mouth of a small harbor could block port operations for some time.

Cargo ship underway. Non-tanker cargo ships at sea, particularly those in restricted waters, could be hijacked by terrorists trained in ship-boarding techniques, similar to the Somali pirates who ply the Gulf of Aden. In fact, increased levels of security on tankers and other high-value targets might mean that ordinary cargo ships would become more vulnerable. If terrorists do not wish to develop such capabilities, they could contract the work to maritime criminals or conduct joint operations. Once seized, any ship can also be used as a weapon.

Industrial plant ashore. Once inside a port facility, terrorists could sabotage oil and gas storage tanks, oil refineries and petrochemical plants, electricity generation and distribution facilities, and cargo handling systems. The abundance of critical infrastructure in port districts would be attractive to terrorists bent on causing maximum disruption but not on killing large numbers of people.

Crowds ashore. Beaches and coastal resorts expose large numbers of vacationing Europeans to mass casualty attacks by terrorists coming from over the horizon.

“
THE HIJACKED VESSEL,
NOW RIGGED AS
A FLOATING BOMB,
ENTERS THE HARBOR
AND RAMS A TANKER.
”

No government has enough resources to protect all these crowds all the time, as the truck attack in Nice, France, so brutally demonstrated.³² Terrorists could use sailing yachts, motorboats, or jet skis as covers for status and action, allowing them to get close to their targets without raising alarm. In position, terrorists could rake crowded beaches with gunfire and grenades without even coming ashore.

NATO warship under way. Warships from the NATO Alliance are now being deployed to interdict human smugglers in the narrow passages between mainland Turkey and the closer Greek islands.³³ These restricted waters render such oceangoing ships vulnerable to ramming attacks from fast boats rigged with explosives. With the reemergence of smuggling in the central region, NATO warships will redeploy and be exposed to such attacks around the Italian islands and Malta as well.³⁴

With a surfeit of terrorist targets ashore, accessible by land and air routes, many would say that maritime terrorism is a low-probability event. But European governments do not have the luxury of planning for only the most likely scenarios; they must prepare for that which exposes the largest number of people to the highest risk—even if those outcomes are unlikely. They must think beyond what is probable and examine what is possible. Security officials would do well to “rehearse the future” by developing a series of planning scenarios based on feasible acts of maritime terrorism in the Mediterranean.³⁵ The following four scenarios might be the beginning of a strategic conversation regarding some of the most devastating contingencies imaginable.

Scenario 1. Despite operational setbacks, ISIS maintains its “beachhead” in and around Sirte, Libya. Increased pressure on human smugglers in the Aegean Sea has created a second wave of smuggling across the central Mediterranean, and ISIS moves to control this lucrative enterprise. The group places a four-person team of operatives into the immigrant stream, posing as refugees from Syria. Unnoticed, they are carrying explosives in their luggage. At the other end of the transit near the Italian island of Lampedusa, two humanitarian relief vessels approach the rubber boat filled with refugees to offload them safely. The terrorists detonate their explosives, killing almost 100 refugees and rescuers.³⁶

Scenario 2. The refugee agreement between the European Union and Turkey has broken down. Syrian refugees have

resumed boat crossings to Kos, despite the overcrowded refugee camps there. Two ISIS fighters have arrived on the island, using the renewed Syrian refugee flow as cover. Partisans from ISIS, having already infiltrated Kos on a remote beach under cover of darkness using their own rubber boat, meet clandestinely with the fighters, passing them clothing with explosives sewn into the material. The terrorists ride the ferry west. As the vessel approaches the pier in Piraeus, passengers line up to disembark. The bombers detonate themselves, one in the back of the crowd and one in the front. More than 50 passengers and crew are killed, with many more injured.

Scenario 3. Al Qaeda in the Islamic Maghreb (AQIM) terrorists hijack a harbor tugboat just off the Moroccan city of Tangier, killing the crew. After dark, the tugboat makes a rendezvous with several explosive-laden rubber boats at a remote beach down the coast. The explosives are

“**ONE SUCCESSFUL
MARITIME ATTACK IN
THE MEDITERRANEAN
REGION COULD
ESTABLISH A TREND.**”

transferred to the tug before it crosses the Strait of Gibraltar. The hijacked vessel, now rigged as a floating bomb, enters the harbor of Gibraltar and rams a Maltese-flagged tanker filled with crude oil, killing the terrorists and several members of the tanker crew. Thick, black smoke from the resulting fire persists for several days as the world watches. Having demonstrated what it can do, AQIM threatens to attack other ships in the area.

Scenario 4. Working from a hijacked Turkish fishing vessel, terrorists acting on behalf of ISIS climb aboard a gas platform operated by the American company Noble Energy in the “Leviathan” exploration block off the coast of Cyprus. After killing everyone on the rig, they attach explosives to the underside of the platform, set timers, and steam away toward the nearby Syrian coast. A large explosion destroys the rig, but enough of the structure remains above the surface to burn in full view of airborne media for many days. A steady stream of natural gas condensate is leaking from the wellhead, fouling the clear waters of the Eastern Mediterranean and threatening area beaches.³⁷

Conclusion

While European authorities are focused on protecting inland cities, maritime targets may become more attractive to terrorists who had initially avoided them. Even though maritime attacks are low-probability events—at least for now—such actions can bring very serious consequences.

One successful maritime attack in the Mediterranean region could establish a trend toward the kinds of attacks discussed here. The menu for maritime terrorism has expanded; terrorist exploitation of this target set is simply a matter of time. European governments, working with their counterparts in southern and eastern Mediterranean states, can avoid the worst outcomes by developing three interlocking lines of strategic effort: defense, offense, and prevention.

Defensive strategies begin with the risk assessment process previously discussed, but resources allocated for defense have to be balanced with those allocated for the other two strategies. Offensive strategies require assets to “find, fix, and finish” terrorists who wish to attack governments, while preventive strategies oblige governments to diminish, and perhaps eliminate, the root causes of terrorism. Unless all three strategies are pursued together, terrorists will continue to score tactical successes against the governments that oppose them. Governments—especially when they act together—have enormous advantages over terrorist organizations. Consequently, creative terrorists (using a new form of “divide and conquer”) work to exploit the political divisions that obstruct national and regional cooperation. The exodus of refugees from the Middle East and North Africa into Europe may be the best example of this.

The Mediterranean Sea and its periphery offer the most natural circumstances for regional cohesion found anywhere in the world. European governments should take the lead in strengthening that cohesion by promoting the collective pursuit of Mediterranean maritime security. Together, all 20 governments, including those now at war with themselves, must identify and extinguish the root causes of terrorism in the region. At the same time, they must continuously defend against the possibility of maritime attacks, pre-emptively neutralize the forces that threaten them, and maintain a high level of readiness to deal with the consequences of maritime terrorism that they cannot prevent. The sea itself is what united this region; perhaps securing the sea can bring it back together. ❖

ABOUT THE AUTHOR

CAPT Paul Shemella (Ret.) was the Combating Terrorism Fellowship Program (CTFP) program manager for the Center for Civil-Military Relations until his retirement in 2015.

Copyright 2017, Paul Shemella. The US federal government is granted for itself and others acting on its behalf in perpetuity a paid-up, nonexclusive, irrevocable worldwide license in this work to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the US federal government. All other rights are reserved by the copyright owner(s). Foreign copyrights may apply.

NOTES

- 1 This article is derived from Paul Shemella, *Global Responses to Maritime Violence: Cooperation and Collective Action* (Stanford, Calif.: Stanford University Press, 2016), chapter 3. A version of this article appeared in Denis Caleta and Paul Shemella, eds., *Comprehensive Approach to Counter Radicalism and Extremism: Future Challenges for Counter Terrorism Process* (Ljubljana, Slovenia: Institute for Corporative Security Studies, April 2016).
- 2 Human security is security at the individual level, generally understood to be the freedom from fear and want.
- 3 See Nicholas Vinocur, “Passport Points to Syria, but Officials Urge Caution,” *Politico*, 14 November 2015: <http://www.politico.eu/article/paris-attacker-slipped-into-europe-with-refugees-isil-molins-france-syria-greece-migrants>
- 4 ISIS militants, faced with resource shortages in Libya, have begun moving in on the lucrative human smuggling trade. See Eric Schmitt, “US Scrambles to Contain Growing ISIS Threat in Libya,” *New York Times*, 21 February 2016: https://www.nytimes.com/2016/02/22/world/africa/us-scrambles-to-contain-growing-isis-threat-in-libya.html?_r=0
- 5 See Jason Schwartz, “Safe Harbor?” *Boston*, July 2010: <http://www.bostonmagazine.com/2010/06/safe-harbor>
- 6 Philip Shenon, “After the War: Security; US Widens Checks at Foreign Ports,” *New York Times*, 12 June 2003: <http://www.nytimes.com/2003/06/12/world/after-the-war-security-us-widens-checks-at-foreign-ports.html>
- 7 The tactic of suicide boat attacks was pioneered in Sri Lanka during the 1980s by the Sea Tigers wing of the Tamil Tigers insurgent group, reminding us that terrorists can mimic each other.
- 8 See Peter Chalk, “Maritime Terrorism,” in *Fighting Back: What Governments Can Do about Terrorism*, ed. Paul Shemella (Stanford, Calif.: Stanford University Press, 2011), 85.
- 9 See Thomas Mockaitis, “Terrorism, Insurgency, and Organized Crime,” in Shemella, *Fighting Back*, 317–31. Also see David Kilcullen, *Out of the Mountains: The Coming Age of the Urban Guerrilla* (New York: Oxford University Press, 2013).
- 10 United States Coast Guard, National Response Team, *On Scene Coordinator Report: Deepwater Horizon Oil Spill* (Washington, D.C.: US Department of Homeland Security, September 2011). James Petroni presents a full discussion of this topic in “Managing Maritime Incidents,” in Shemella, *Global Responses to Maritime Violence*, 179–99.
- 11 Shemella, *Global Responses to Maritime Violence*, 251–56.
- 12 “Yemeni Rebels Destroy UAE Military Logistics Ship in Red Sea,” Reuters, 3 October 2016: <http://gcaplain.com/yemen-rebels-destroy-uae-military-logistics-ship-in-red-sea/>

- 13 There is even a cruise ship “tracker” available on the internet that would allow potential hijackers to monitor a ship’s position. One such website can be viewed at <http://www.cruisin.me/cruise-ship-tracker>
- 14 There are hundreds of operators and thousands of ports in the Mediterranean ferry network. For instance, the Greek city of Piraeus, the busiest ferry port in Europe, has 108 connections. For a complete list of ferries in southern Europe, see <http://www.ferrylines.com/operators/europe-south>
- 15 For a riveting account of the *Estonia* sinking, see William Langewiesche, *The Outlaw Sea: A World of Freedom, Chaos, and Crime* (New York: North Point Press, 2004), 127–95. For more on the Sewol tragedy, see Steven Borowiec, “Pain and Anger in South Korea Two Years after the Sewol Ferry Tragedy,” *Los Angeles Times*, 15 April 2016: <http://www.latimes.com/world/asia/la-fg-south-korea-ferry-20160415-story.html>
- 16 For a current listing of LNG gasification and regasification facilities worldwide (operating, planned, and proposed), see <http://www.globalnginfo.com/world%20lng%20plants%20&%20terminals.pdf>
- 17 At least one terrorist killed 38 tourists on a Tunisian beach in June 2015. See Matthew Weaver, “Tunisia Beach Attack: Witnesses Say More Than One Gunman Involved,” *Guardian*, 30 June 2015: <http://www.theguardian.com/world/2015/jun/30/tunisia-beach-attack-sousse-witnesses-say-more-than-one-gunman-involved>
- 18 For an extended discussion, see John Green, “Welfare of Seafarers Is Important to Security,” *Financial Times*, 12 February 2016: <https://www.ft.com/content/9f61718e-ce8f-11e5-831d-09f7778e7377>; Sam Jones, “Europe’s Ports Vulnerable as Ships Sail without Oversight,” *Financial Times*, 4 February 2016: <https://www.ft.com/content/4d71dc5e-c8ec-11e5-be0b-b7ece4e953a0>
- 19 Editor’s note: For a detailed description of these operations, see LT Malaka Chandradasa, “Learning from Our Enemies: Sri Lankan Naval Special Warfare against the Sea Tigers,” *CTX* 2, no. 2 (May 2012): <https://globalecco.org/learning-from-our-enemies-sri-lankan-naval-special-warfare-against-the-sea-tigers>
- 20 Narrow straits can also be mined with improvised explosive devices (or simply inert devices, claimed to be mines). Standoff weapons can also be effective, even against warships. For an example, see “Egypt Navy Ship ‘Hit by Sinai Militants’ Missile,” BBC News, 16 July 2015: <http://www.bbc.com/news/world-middle-east-33557180>
- 21 There are many charter companies seeking tourist business, especially in Greece and Italy. A passport and certificate of competency are required, but security checks are not taken seriously. There are so many options online that brokerage websites offer to simplify the traveler’s choice.
- 22 Counterterrorism expert David Kilcullen and others have pointed out that the world is becoming more coastal and more urban, providing an ever-expanding set of maritime targets. See, for example, Kilcullen, *Out of the Mountains*.
- 23 See Thomas Joscelyn, “Terrorism in Africa: The Imminent Threat to the United States,” FDD’s Long War Journal, 29 April 2015: <http://www.longwarjournal.org/archives/2015/04/terrorism-in-africa-the-imminent-threat-to-the-united-states.php>
- 24 For a complete description of the Special Forces target analysis model, see Headquarters, Department of the Army, *Special Forces Intelligence and Electronic Warfare and Operations*, FM 34-36 (Washington, D.C.: HQ, Department of the Army, 1991), Appendix D: <https://fas.org/irp/doddir/army/fm34-36/toc.htm>
- 25 Not all assessment criteria are equally important. While the US model does not adjust for this, the CARVES model assigns “weighting factors” to each criterion, adding a degree of precision to the process.
- 26 Now a NATO term of art.
- 27 For example, al Qaeda is focused on attacking non-Muslims and avoiding publicity, while ISIS attacks everyone and promotes its “Caliphate” openly. These differences and others would affect the weighting criteria used.
- 28 For a detailed description of how to use the model, see Shemella, *Global Responses to Maritime Violence*, 30–48.
- 29 A good example of what happens when government planners do not think like those who wish to attack them can be seen in the story of the Norwegian and British sabotage of the German-controlled Vemork heavy water plant in 1943. For an account of the raid and a gripping lesson in target analysis, see Neal Bascomb, *The Winter Fortress: The Epic Mission to Sabotage Hitler’s Atomic Bomb* (Boston: Houghton Mifflin Harcourt, 2016).
- 30 The numbers themselves are less important than the discussion required to defend the numbers. Multiple panels of experts, each with a variety of experience and perspectives, can be convened to lay the foundation for defensive strategies.
- 31 Many terrorist operatives, especially from the major threat groups, are more than just tacticians; they are also spies. With this new identity, they must practice what intelligence agencies call “tradecraft,” generally understood to mean working undercover to recruit new members, conduct business for needed income, survey targets, and execute attacks.
- 32 French president François Hollande stated that even the tightest security measures could not have stopped the attack in Nice. He explained that Bastille Day has symbolic value for the enemies of freedom. See Alissa J. Rubin et al., “France Says Truck Attacker Was Tunisian Native with Record of Petty Crime,” *New York Times*, 15 July 2016: <https://www.nytimes.com/2016/07/16/world/europe/attack-nice-bastille-day.html>
- 33 Where they are not deliberately deployed, warships are bound by international law to render assistance to any refugees they encounter.
- 34 Terrorist attacks on warships underway are not unprecedented. Sri Lankan navy ships were attacked repeatedly by the Sea Tigers’ “swarms” of small boats.
- 35 For a genuinely readable guide to scenario planning, see Peter Schwartz, *The Art of the Long View: Planning for the Future in an Uncertain World* (New York: Random House, 1996).
- 36 Second- and third-order effects might include restrictive Italian government policies such as turning refugees away, stopping lifeboats farther out to sea, or curtailing civil liberties for refugees already ashore.
- 37 Second- and third-order effects in this case might include long-term environmental consequences for the Eastern Mediterranean, leading to international lawsuits and the further weakening of international cooperation.

Drones and the Future of Security Policy: A Maritime Case Study for Assessing the Risk of Small Unmanned Aircraft Systems

John J. Caton, The Cadmus Group

GIVEN THE RECENT PROLIFERATION OF AFFORDABLE AND USER-FRIENDLY small unmanned aircraft systems (sUASs, or “drones”) in the commercial marketplace, security professionals around the globe are grappling with how to safely, efficiently, and legally protect critical infrastructure sites from misuse of this emerging technology. While much attention has been afforded to the dangers drones pose to aircraft, most public research has overlooked sensitive facilities such as nuclear power plants, electrical power stations, and major ground transportation hubs. Given the recent use of weaponized sUASs in Syria and Iraq, it is imperative that both military and civilian security professionals have the tools necessary to combat this developing threat. To better illustrate the risks associated with commercially available drones and the danger they pose to infrastructure security, this article uses a major port in the United States (given the pseudonym Port of Opal City to protect existing security policies and procedures) as the case study for a comprehensive severity, probability, and exposure (SPE) risk analysis.

Under current US law, an aircraft is defined as “any contrivance invented, used, or designed to navigate, or fly in, the air.”¹ Building on this definition, an unmanned aircraft (UA) is legally defined as “any aircraft that is operated without the possibility of direct human intervention from within or on the aircraft,” while an unmanned aircraft system (UAS) is both a UA and its “associated elements, including communication links and the components that control the unmanned aircraft, that are required for the pilot in command to operate safely and efficiently in the national airspace system.”² It is important to note that the focus of this article is on small UAs that weigh less than 55 pounds.³ While there is no globally recognized regulatory definition for the term *drone*, this popular term is commonly used to mean an sUAS, and this article uses both words interchangeably. Although this article uses a US port and the US legal environment for its analysis, its general methodology and findings are widely applicable to similar facilities in other countries. The article’s recommendations can likewise be modified to fit other social and legal situations.

Commercially Available Rotary Wing SUASs

Tables 1 through 6 list the current top 10 commercially available rotary wing drones by the following criteria (all prices are in US dollars): (1) lowest cost, (2) highest cost, (3) longest flight time (in minutes), (4) longest operating range (in feet), (5) largest payload capacity (in pounds), and (6) maximum flying speed (in miles per hour).⁴ Rotary-wing sUASs exclusively marketed for military use are not included in this list. The Ehang 184, while marketed as a drone, is also not included in this list because it can potentially carry an operator inside the aircraft itself while airborne.⁵ Fixed-wing drones are not included in this analysis because of US buyers’ strong preference for rotary-wing drones.⁶ The purpose of this list is to provide the reader with a sense of the capabilities of commercially available drones. These lists are accurate as of June 2016 and are liable to change.

RESEARCH
HAS OVER-
LOOKED THE
DANGERS
DRONES POSE
TO SENSITIVE
FACILITIES.

LOWEST COST

Rank	Name	Company	Number of Rotors	Cost (USD)	Flight Time (Minutes)	Weight (lbs.)	Payload Capacity (lbs.)	Maximum Altitude (ft.)	Maximum Operating Range (ft.)	Maximum Speed (mph)
1	H101	Floureon	4	\$15.00	7	0.7	N/A	Unknown	65	Unknown
2	V911S	WLtoys	4	\$15.00	6	0.02	N/A	Unknown	98	Unknown
3	FX-10 Mini	Floureon	4	\$15.00	6	0.02	N/A	Unknown	82	Unknown
4	V609	HJ	6	\$15.00	5	0.03	N/A	Unknown	164	Unknown
5	X165	XinLin	4	\$16.00	5	0.03	N/A	Unknown	72	Unknown
6	L6058	Lishtoys	4	\$17.00	8	0.01	N/A	Unknown	98	Unknown
7	X165	XinLin	4	\$18.00	5	0.03	N/A	Unknown	72	Unknown
8	H8 Mini	JJRC	4	\$20.00	5	0.4	N/A	Unknown	492	Unknown
9	Rc Mini	Udi	4	\$20.00	5	0.02	N/A	Unknown	98	Unknown
10	H22	JJRC	4	\$20.00	7	0.6	N/A	Unknown	98	Unknown

HIGHEST COST

Rank	Name	Company	Number of Rotors	Cost (USD)	Flight Time (Minutes)	Weight (lbs.)	Payload Capacity (lbs.)	Maximum Altitude (ft.)	Maximum Operating Range (ft.)	Maximum Speed (mph)
1	Titan	XactSense	8	\$120,000	30	18	50	180	52,805	Unknown
2	MAX 8	XactSense	8	\$65,000	25	5	20	397	Unknown	Unknown
3	F100	AEE	4	\$58,000	70	13.2	5.51	4,921	32,808	61
4	cyberQuad	Sci.Aero	4	\$37,000	25	3.7	1.76	Unknown	1,640	37
5	F50	AEE	4	\$37,000	40	4.4	Unknown	2,953	65,617	11
6	G4 Eagle V2 Cargo	Service-Drone	8	\$35,360	30	5.5	5.51	Unknown	6,561	37
7	Multirotor Eagle V2 + FREEFLY MoVI M5	Service-Drone	8	\$33,940	10	9.9	4.41	Unknown	3,281	36
8	MULTIROTOR G4 Eagle V2	Service-Drone	8	\$28,260	30	5.5	5.51	Unknown	6,562	37
9	MULTIROTOR G4 Surveying Robot	Service-Drone	6	\$25,420	20	6	5.07	Unknown	9,843	18
10	Martin Indago	Lockheed	4	\$25,000	45	4.9	0.44	498	6,562	45

LONGEST FLIGHT TIME (Minutes)

Rank	Name	Company	Number of Rotors	Cost (USD)	Flight Time (Minutes)	Weight (lbs.)	Payload Capacity (lbs.)	Maximum Altitude (ft.)	Maximum Operating Range (ft.)	Maximum Speed (mph)
1	Pocketflyer	CyPhy Works Inc.	6	Unknown	120	0.20	N/A	Unknown	76	Unknown
2	MD4-1000	Microdrones	4	\$2,000	88	5.80	2.65	3,281	1,640	27
3	F100	AEE	4	\$58,000	70	13.20	5.51	4,921	32,808	61
4	EF 44 "Atlas"	Allied Drones	4	\$15,000	60	Unknown	4.41	Unknown	Unknown	Unknown
5	QR X800	Walkera	4	\$2,700	60	8.60	Unknown	Unknown	6,562	Unknown
6	Fotokite Pro	Fotokite	4	\$10,000	60	1.30	Unknown	Unknown	65	Unknown
7	Vader X4	SteadyDrone	4	\$19,995	50	8.40	9.48	13,123	4,921	44.7
8	Altura Zenith ATX8	Aerialtronics	8	\$2,000	45	7.70	6.39	Unknown	3,281	44.7
9	HX3	Yuneec Flying Eyes	6	\$3,000	45	3.10	4.4	Unknown	6,562	33
10	HL48 "Chaos"	Allied Drones	8	\$20,000	45	15.00	15	Unknown	65,617	30



LONGEST OPERATING DISTANCE (Feet [ft.])

Rank	Name	Company	Number of Rotors	Cost (USD)	Flight Time (Minutes)	Weight (lbs.)	Payload Capacity (lbs.)	Maximum Altitude (ft.)	Maximum Operating Range (ft.)	Maximum Speed (mph)
1	AgBOT	Aerial Technology International	4	\$9,750	26	10.4	Unknown	Unknown	87,598	38
2	HL48 "Chaos"	Allied Drones	8	\$20,000	45	15	15	Unknown	65,617	30
3	F50	AEE	4	\$37,000	40	4.4	Unknown	2,953	65,617	11
4	Titan	XactSense	8	\$120,000	30	18	50	180	52,805	Unknown
5	Sky	Flytrex	4	\$650	30	2.8	4.41	Unknown	36,089	44.7
6	RC Hexacopter Hawk F700 RTF	Skyhawk	6	\$1,600	25	4	2.65	984	32,808	23.4
7	F100	AEE	4	\$58,000	70	13.2	5.51	4,921	32,808	61
8	350 QX2 AP Combo	Blade	4	\$900	15	2.2	0.55	Unknown	16,404	Unknown
9	Phantom 4	DJI	4	\$1,400	28	3	1.02	19,685.04	16,404	44.7
10	Matrice 100	DJI	4	\$3,300	40	5.2	2.2	Unknown	16,404	49.2

HEAVIEST PAYLOAD CAPACITY (Pounds [lbs])

Rank	Name	Company	Number of Rotors	Cost (USD)	Flight Time (Minutes)	Weight (lbs.)	Payload Capacity (lbs.)	Maximum Altitude (ft.)	Maximum Operating Range (ft.)	Maximum Speed (mph)
1	Titan	XactSense	8	\$120,000	30	18	50	180	52,805	Unknown
2	Transformer UGAV	Advanced Tactics Inc	6	\$25,000	25	35.1	22.49	20,013	Unknown	44.7
3	MAX 8	XactSense	8	\$65,000	25	5.00	20	396	Unknown	Unknown
4	Infinity 9Pro Octocopter	TurboAce	8	\$15,098	15	15.00	20	Unknown	6,335	Unknown
5	QUAD X	SteadyDrone	4	\$13,999	20	7.90	17.64	Unknown	Unknown	Unknown
6	AIR8	Airborne Robotics	8	\$15,500	15	37.80	15.4	Unknown	6,500	31
7	HL48 "Chaos"	Allied Drones	8	\$20,000	45	15.00	15	Unknown	65,617	30
8	Skylib-8 Ti-QR	Aeronavics	8	\$17,945	15	Unknown	11.02	Unknown	9,842	Unknown
9	Thor X4	Aerial Technology International	8	\$14,150	15	34.2	10	Unknown	Unknown	66
10	Skylib-X4 Ti-QR	Aeronavics	8	\$15,592	20	Unknown	7.72	Unknown	9,842	49

MAXIMUM SPEED (Miles Per Hour [mph])

Rank	Name	Company	Number of Rotors	Cost (USD)	Flight Time (Minutes)	Weight (lbs.)	Payload Capacity (lbs.)	Maximum Altitude (ft.)	Maximum Operating Range (ft.)	Maximum Speed (mph)
1	F100	AEE	4	\$58,000	70	13.2	5.51	4,921	32,808	61
2	Matrice 100	DJI	4	\$3,300	40	5.2	2.2	Unknown	16,404	49.2
3	Kasper	North American	4	\$720	30	1.4	0.5	Unknown	1,969	48.9
4	Vader X4	SteadyDrone	4	\$19,995	50	8.4	9.48	13,123	4,921	45
5	Altura Zenith ATX8	Aerialtronics	8	\$2,000	45	7.7	6.39	Unknown	3,281	45
6	Indago	Lockheed Martin	4	\$25,000	45	4.9	0.44	499	6,562	45
7	Sky	Flytrex	4	\$650	30	2.8	4.41	Unknown	36,089	45
8	Chroma	Blade	4	\$1,490	30	2.9	Unknown	Unknown	1,312	40
9	MULTIROTOR G4 Eagle V2	Service-Drone	8	\$28,260	30	5.5	5.51	Unknown	6,562	37
10	G4 Eagle V2 Cargo	Service-Drone	8	\$35,360	30	5.5	5.51	Unknown	6,561	37



Severity, Probability, and Exposure Risk Analysis Methodology

Quantifying the risk of an sUAS attack is an especially tedious task, given the variety of harmful ways in which a drone may be deployed. Commercially available sUASs are capable of circumnavigating traditional physical security measures and have the capacity to deliver payloads designed to cause either physical or cybernetic damage. The SPE risk analysis is a method of objectively assessing risk that has been used by the US Coast Guard. The simple methodology involves assigning values to a set of pre-defined criteria. For the purposes of this case study, the first area of focus, *severity*, evaluates the degree to which a successful sUAS attack on the Port of Opal City's infrastructure, personnel, and/or trade-related vehicles and vessels will affect the local, state, and national economies. The *probability* component analyzes drone sales in the United States and reported incidents of drone misuse in other US ports, noting some historical incidents of nefarious drone use worldwide. The final component, *exposure*, classifies targets in the Port of Opal City and discusses pre-existing security policies that the port has in place.

The values allocated to each SPE variable are multiplied together to generate a final risk value, which is then compared against the Coast Guard's pre-determined risk guidance index to determine the port's degree of vulnerability to attack. This study uses objective benchmarks tailored to the Port of Opal City in place of the Coast Guard's original SPE standards, a methodology that may similarly be adapted for use at any major critical infrastructure site, provided enough data is publicly available to establish both comparative and objective benchmarks for a comprehensive review. The language ascribed to each value specifically for the Port of Opal City appears in table 7 below.

Table 7: Criteria and Values for Severity, Probability, Exposure, and Risk of a Drone Attack on a Major Port Facility

Severity Scale	
1	No change in port operations
2	Temporary shutdown of one port pier for less than one hour
3	Shutdown of one port pier for more than one hour but less than 24 hours
4	Shutdown of two or more port piers for more than one hour but less than 24 hours
5	Shutdown of two or more port piers exceeding 24 hours
Probability Scale	
1	0%–20% chance of a drone attack or accidental drone-related incident, which would negatively affect port infrastructure, personnel, and/or trade-related vessels/vehicles
2	21%–40% chance of such a drone-related incident
3	41%–60% chance of such a drone-related incident
4	61%–80% chance of such a drone-related incident
5	81%–100% chance of such a drone-related incident

Exposure Scale

1	Port security uses effective anti-UAS countermeasures. Port precautions exceed those implemented at similar US ports.
2	Port security does not use anti-UAS countermeasures. Port precautions exceed those implemented at similar US ports.
3	Port security does not use anti-UAS countermeasures. Port precautions mirror those implemented at similar US ports.
4	Port security does not use anti-UAS countermeasures. Port security precautions fall below those implemented at similar US ports.

Risk Values*	Degree of Risk	Guidance
80–100	Very High	Discontinue, Stop
60–79	High	Correct Immediately
40–59	Substantial	Correction Required
20–39	Possible	Attention Needed
1–19	Slight	Possibility Acceptable

*Risk value = severity × probability × exposure

Port of Opal City

As mentioned earlier, the Port of Opal City is a pseudonym for the actual US seaport on which this SPE risk analysis was originally based. While key details have been removed or altered to obscure the port's true identity and uphold the integrity of specific security protocols, the resulting scores of the SPE risk analysis have not been altered in any way. These scores appear at the end of each SPE component evaluation.

The Port of Opal City processes over five million 20-foot container units annually and generates billions of dollars in annual trade revenue. Beyond indirectly generating millions of dollars for local businesses that service port customers, the harbor provides well over 200,000 jobs for the region as a whole. The port contracts with the local police department to provide security and also has a separate security patrol dedicated to monitoring port operations. Each of its 12 piers is leased to a private company, which in turn employs its own private facility security. The port authority (the port's management body) actively maintains relationships with both federal law enforcement agencies and regional emergency management agencies. The port has not deployed any sUAS countermeasures and currently does not permit any drone operations within the facility due to security concerns. Both the local police force and the harbor-specific police force currently abide by Federal Aviation Administration (FAA) guidance to not interfere directly with potentially illegal drone operations at the port but instead to report such incidents to the region's FAA office.⁷

Severity

The US Coast Guard defines severity as “an event's potential consequences measured in terms of degree of damage, injury, or impact on a mission.”⁸ To complement this definition, this section focuses on the likely economic effects that a drone attack on the Port of Opal City would have at the local, state, and

“ THE PORT PROCESSES
OVER FIVE MILLION
20-FOOT CONTAINER
UNITS ANNUALLY. ”



national levels. While there has never been a known drone attack on a US port, the documented effects of national disasters, union strikes, and deliberate or accidental damage to US port infrastructure can serve to illustrate how a kinetic or cybernetic drone assault could have wide-reaching economic ramifications.

It is important to consider that even temporary disruptions in port operations are likely to cause extensive economic damage to the community, region, and nation. A simulated biological attack or even excessive hindrance by drones could result in a work slowdown or even a strike by port labor. The California longshoremen's strike of 2012, for example, resulted in supply chain disruptions that cost over \$1 billion a day.⁹ Studies on such a strike occurring at the Ports of New York and New Jersey estimated losses of \$110 million per week in economic output.¹⁰

A RAND report detailing the immediate ramifications of a hypothetical nuclear explosion in the Port of Long Beach stated that such an attack could cost the nation over \$1 trillion within 24 hours following the initial detonation.¹¹ The report furthermore recognized that any chemical, biological, radiological, nuclear, or explosive attack upon a major US port would likely result in the immediate closure of nearby ports as a precautionary measure against any further attacks.¹² The psychological fear of a secondary attack coupled with even a temporary precautionary closure of other major US ports has the high potential to wreak economic havoc exceeding that of the projected \$1 trillion loss.¹³

While a drone carrying a full-scale nuclear weapon is highly unlikely for a number of reasons, the potential for a UA to deliver an explosive containing radioactive material is entirely possible. A well-orchestrated attack carried out by multiple sUASs on two or more ports using conventional explosives might result in other precautionary port closures, magnifying the initial economic losses caused by the original attack. Given that a UA's point of origin cannot always be traced, concerns over a follow-up assault by other drones could force port operations adjacent to the initial attack site to cease until local, state, and federal authorities decide that it is safe to resume normal operations. Even unintentional drone mishaps that involve port labor and result in a strike could cause a slowdown of port operations until temporary replacement workers

were found. A well-timed, albeit minor, assault by a single drone has the potential to affect the economy not only at the regional level but also at the national level. Given this fact, a deliberate drone assault or even an accidental drone crash that damages critical port infrastructure has the potential to shut down or delay port operations for two port piers for more than one hour but less than 24 hours, at the very least.

Severity Score: 4 (of a possible 5; see table 7)

Probability

Given the relatively recent proliferation of commercial drones in the US marketplace, it is difficult to gauge the probability of a drone attack or accident on any American port. By combining the number of commercial drones presently in circulation in the United States with projected sales figures for the near future to establish a baseline, and comparing this figure with both drone incidents reported by the FAA and a sampling of reported drone

incidents at US ports nationwide, it is possible to arrive at some estimates of probability. In addition, a brief overview of some historical nefarious uses of drones provide further context to the probability of an sUAS attack on a major port facility.

At the present time, exact drone sales figures in the United States are not known, because the majority of sUAS manufacturers choose not to disclose them. Despite this lack of precise data, the FAA estimates that there are presently 1.9 million drones currently in circulation, with that

number likely to rise to seven million units by the year 2020.¹⁴ The FAA has also noted a sharp increase in the overall number of drone-related incidents or "close calls" in the United States over the past four years. Most of these incidents involve drones flying too close to commercial aircraft. In 2015, over 1,200 of these incident reports were filed, raising concerns among travelers.¹⁵ The Academy of Model Aeronautics has challenged the high number of reported incidents by stating that the FAA's notion of "close calls" lacks any clear regulatory definition, and that many incidents include drones that were conducting legal airborne operations at the time.¹⁶

Presently, there is no public database listing domestic drone incidents at US ports. In an attempt to shed further light on this issue, the author contacted 59 US port



authorities and asked them to disclose how many or if any drone-related incidents had occurred at their respective facilities between July 2014 and July 2016. Drone-related incidents were defined as unsanctioned drone activity above or on port property or the recovery of a crashed commercial drone on port property. The data compiled from this survey can be found in table 8. At the request of the port security officers contacted for this research, ports have been grouped by annual cargo volume in short tons and are not identified by name. A distinction was made between those ports that had no recorded drone incidents and those that chose not to disclose the number of incidents (only 12 of the 59 port authorities contacted for the study were willing to share that information). There were fewer than five reported drone incidents at nearly all US ports over the past two years.

Table 8. Publicly Disclosed Drone Incidents at US Ports, July 2014–July 2016

Annual Cargo Volume in Short Tons	Number of Ports Contacted in Given Cargo Volume Range	Number of Ports Reporting Zero Drone Incidents	Number of Ports which Reported 1–5 Drone Incidents	Number of Ports which Reported 6 or More Drone Incidents	Number of Ports which chose not to Disclose Number of Drone Incidents
200,000,000+	2	–	–	–	2
199,999,999–100,000,000	1	–	–	–	1
99,999,999–50,000,000	10	–	3	–	7
49,99,999–25,000,000	12	1	–	1	10
25,000,000–1,000,000	34	6	1	–	27

Commercially available drones have been used successfully in a variety of nefarious operations, ranging from surveillance of critical infrastructure sites to actual bomb attacks. The following incidents highlight how commercially available drones have the potential to be used as weapons and for surveillance activities and smuggling operations.

- An online video published by ISIS showed footage captured from a drone over the Baji oil refinery in Iraq.¹⁷ It is believed that the footage was used to assist ISIS commanders in carrying out a later attack on the same facility in April 2015.¹⁸
- There have been numerous reports of drones being used to smuggle illegal drugs across the US-Mexico border. The first seizure of these drug-carrying drones occurred in August 2015, when US Border Patrol agents seized a drone loaded with 28 pounds of heroin.¹⁹ The US Drug Enforcement Agency estimates that over 150 drone drug trafficking trips were made in 2012 alone.²⁰
- In October 2014, during a police interview, El Mehdi Senglali Fathi discussed his plans to carry out attacks on an unnamed US university and federal building by adding an explosive payload to commercially available drones.²¹
- In October 2016, Kurdish fighters shot down an ISIS surveillance drone, which exploded as they were inspecting the wreckage. This was believed to be the first incident of a deliberate bombing mission via a commercial sUAS.²²



- In April 2015, a rotary wing drone carrying 100 grams of “low-level radioactive sand” landed on the roof of the Japanese prime minister’s office in what was later determined to be an act of protest by a private citizen.²³

Coupling the FAA’s estimation of 1.9 million privately owned drones currently in the United States with its 1,200 reported “close calls” involving drones, the current threat of a drone attack on the Port of Opal City would appear to be relatively low. Given the FAA’s projection of dramatically increasing drone sales in the next four years, however, the likelihood of either a deliberate or accidental drone incident at the Port of Opal City is bound to increase significantly in the near future.²⁴ The economic significance of the Port of Opal City and its lack of deployed drone countermeasures (see table 7: Exposure) mean that the probability that the port will be the target of a drone attack or the victim of an accidental drone crash in the near future is relatively high and liable to increase in the coming years.

Probability Score: 4 (of a possible 5; see table 7)

Exposure

The preceding “Severity” and “Probability” sections respectively addressed the potential economic implications of port supply chain disruptions and the likelihood of drone attacks in the future. This section, “Exposure,” evaluates port-specific targets and precautions the Port of Opal City has taken in order to mitigate the risk of a damaging sUAS attack or accident. The Port of Opal City has several types of possible targets, both structural and human, that could attract an assailant. The primary mobile targets of a potential drone assault are ships, trucks, cars, trains, and helicopters. While the type of cargo it carries may play an important role in determining whether a particular mobile target is chosen, officials should consider the target’s secondary factors of strategic and social significance when evaluating possible security measures. An assault on a large passenger ship, for instance, could have significant effects on the entire cruise industry by diminishing such economic activity as future cruise sales, ship purchases, port facility usage, and employment.

The infrastructure critical to most port operations, such as cranes, fuel pumping stations, conveyers, rail lines, and buildings where personnel are located, could potentially be immobile targets for a drone attack. While multiple drones may be necessary to severely damage a ship, a single drone with an explosive payload could cause immeasurable harm to less-protected infrastructure sites. Piers that deal with the transportation of corrosive materials and fuel pumping stations that are uncovered and unprotected would be ideal targets for a single drone assault. The deliberate destruction or blocking of rail lines in and around port property could likewise slow the delivery of goods.

It is important to keep in mind that not all drone attacks must be kinetic to cause large-scale damage. Structures that house sensitive information are at risk for remote cyber attacks and surveillance. Commercial drones have demonstrated the ability to carry jamming devices for remote use on a cyber target with no adverse effects to the drone’s command and control systems.²⁵ An sUAS could likewise be outfitted with penetration testing software or unconventional surveillance devices to conduct remote cyber attacks on technological infrastructure. For example, a group of researchers at Ben-Gurion University in

“**AGENTS SEIZED A
DRONE LOADED WITH
28 POUNDS OF HEROIN.**”

Israel demonstrated that a drone outfitted with a photodiode sensor is capable of receiving proprietary data on compromised air-gapped computers via the system's built-in LED lights.²⁶

Both staff and private citizens within the Port of Opal City are potential targets for a drone attack. Unlike mobile and immobile targets, personnel warrant a separate classification because of their unique responsibility in guaranteeing that the port operates efficiently. While direct kinetic attacks on personnel are a possibility, the psychological ramifications of a drone assault may have far more devastating effects on port operations overall. Simulated biological attacks, such as a drone deliberately dropping any kind of white powder, are liable to result in the evacuation of personnel and the disruption of port operations. Even a drone carrying out port-sanctioned operations is liable to accidentally drop objects, which could result in injury or temporary suspension of port operations.

For this study, it is important to note that the port will be graded only on those security measures and procedures that are public knowledge. As mentioned earlier, the port has a vast array of traditional security measures presently at its disposal; one of the unique features of the maritime environment is its overlapping levels of security. Each privately leased pier has its own private security system, which is managed by facility security officers. The Port of Opal City's security sector maintains an active relationship with the state's emergency services department, US Customs and Border Patrol, the Coast Guard, the Navy, Department of Homeland Security investigators, and the FBI. Despite the various security agencies assigned to guard the US maritime economy, however, the Port of Opal City and most other ports in the nation lack the capacity to legally acquire and deploy the technology necessary to defeat a hostile airborne UA. Given the port's numerous targets, lack of sUAS-specific countermeasures, and operational vulnerabilities to cyberattacks, the port has a high degree of exposure to a potential drone attack.

Exposure Score: 3 (of a possible 4; see table 7)

Risk Assessment

Risk Value = Severity × Probability × Exposure

Risk Value = 4 × 4 × 3

Risk Value = 48 (of a possible 100; see table 7)

Utilizing the SPE formula, the Port of Opal City is assigned a risk value of 48. According to the Coast Guard's Risk Value chart, this number shows that the port is at a "substantial" degree of risk of a drone attack and that the port authority should take measures to improve security (see table 7: Guidance).

Policy Solutions and Available Countermeasures

The FAA's definition of navigable airspace as "airspace at and above the minimum flight altitudes ... including airspace needed for safe takeoff and landing" has generated much controversy in the wake of commercial drone use, given the lack of clear legal guidance on what constitutes "minimum flight altitudes."²⁷ Presently, the FAA categorizes drones as aircraft, which makes it the only US government body with jurisdiction over sUAS use or misuse.²⁸ The FAA has

“THE PSYCHOLOGICAL RAMIFICATIONS OF A DRONE ASSAULT MAY HAVE DEVASTATING EFFECTS ON PORT OPERATIONS.”

released preliminary guidance for local law enforcement officers to follow, should they witness a possible violation of any sUAS regulations, but local police do not have any authority to stop airborne drone operations at this time. Their role is limited to interviewing witnesses, identifying any sUAS operator(s), recording the location of the alleged sUAS incident, and identifying nearby sensitive locations, events, and/or activities.

Nefarious sUAS activities are bound to occur in restricted airspace regardless of any federal laws. For this reason, both military and civilian facility security officers must be aware of all viable countermeasures at their disposal if they wish to mitigate the dangers of this emerging threat. In the United States, however, many of these countermeasures remain illegal and would require prior federal approval.

Drone countermeasures tend to fall into one of two major categories: kinetic or cybernetic. A kinetic countermeasure involves disabling a targeted drone by physically damaging or immobilizing one or more components necessary to keep the drone aloft. Cybernetic countermeasures encompass a variety of tactics involving electronic manipulation of a drone's communication/guidance system. The legal parameters surrounding kinetic and cybernetic countermeasures present their own unique challenges.

Kinetic Countermeasures

Falconry abatement is the use of specific kinds of birds of prey (e.g., falcons and buteos) to scare small migratory birds away from airports in order to prevent the smaller birds from being sucked into airplane engines.²⁹ The Dutch National Police Force and French Air Force have been experimenting with using birds of prey to attack airborne drones, but this strategy has never been implemented in the United States.³⁰ While the US federal government now allows states to issue falconry licenses in accordance with state laws as of 2014, some states still reserve the right to issue specialty licenses regarding the use of non-domestic animals and birds (species that are not traditionally raised for companionship or food) for commercial services.³¹ A drone abatement license could hypothetically be issued as long as a master falconer, in compliance with local, state, and federal animal welfare laws, took the necessary precautions to protect his or her birds from any damage that might be caused by sUAS rotors. If these conditions could be normalized, falconry

drone abatement could become a reality not only for airports but also for major centers of economic commerce and critical infrastructure sites.

Another kinetic drone countermeasure that is slowly making its way into the global marketplace is the launching of a projectile at a drone with the goal of either trapping it or knocking it out of the sky. Physically discharging a metal or rubber bullet or shell at a drone is not a legally valid option in the United States at this time.³² While shooting pressurized water from a fire hose may be another option for physically knocking a drone out of the sky, the time necessary to set up a pump and hose is not practical, given how quickly a drone incident may occur. Companies such as SkyWall have developed a shoulder-fired canister that traps a drone with a net and then deploys a parachute to slowly lower the ensnared drone to the ground.³³ While SkyWall has not yet set a release date for this countermeasure, it has great potential for use in the United States because it minimizes the risk of injuring bystanders with falling debris.

IN THE UNITED STATES, MANY DRONE COUNTERMEASURES REMAIN ILLEGAL AND WOULD REQUIRE PRIOR FEDERAL APPROVAL.

The most widely practiced drone countermeasure has been the use of "anti-drone" drones. These drones are manually operated and typically sport a large net below the drone's airframe. If flown properly, these drones can be used to chase down and catch a targeted sUAS. This countermeasure has seen especially wide use in Tokyo, Japan, where the local government has established an anti-drone squad within the Tokyo police force.³⁴ Other models of anti-drone drones include net-firing drones, but this technology is still in the experimental stage.

Cybernetic Countermeasures

Cybernetic countermeasures can remove a drone from the sky while minimizing any potentially damaging physical fallout. Three primary cybernetic solutions are spoofing, hacking, and jamming. Spoofing deceives a drone's control system into accepting commands from a communication signal that was not generated by the true pilot's base station. The operator spoofing the targeted sUAS must have either prior knowledge of the exact wireless channel the drone is functioning on or the technological ability to independently determine that information.³⁵ Hacking a drone is, as the name implies, sending invasive computer code to the drone's onboard flight controller or base station transponder and changing the guidance

programming to accept a different command signal or operate on a different set of flight protocols.³⁶ To jam a drone, the countermeasure operator spams the drone's radio frequency with incoherent "noise" that prevents the drone from communicating with the true operator's base station. Most commercial drones have a built-in "safe mode," which is designed to either keep the sUAS stationary in the air or fly it back to the site where it made its initial takeoff, should it lose contact with its base station.

While all three cybernetic options have been proven to be among the safest solutions to mitigating unwarranted drone activity, some countries, including the United States, have cyber security laws that impose regulatory hurdles to such technology. Hacking, for instance, is generally illegal, although it is unclear whether using such technology as a drone deterrent would be unlawful.³⁷ Spoofing, while not explicitly illegal, may fall under the definition of hacking in certain instances. Furthermore, spoofing depends heavily on external factors such as the target drone pilot's signal strength and the lack of any anti-spoofing hardware on the targeted drone.³⁸ Jamming has been the most widely advertised solution to unwanted drones, but given its potential for abuse, the US Federal Communications Commission has prohibited the use of jamming technology by any non-federal agency.³⁹

Presently, the FAA is field-testing the British-made Anti-UAV (unmanned aerial vehicle) Defense System (AUDS).⁴⁰ A ground-based system designed to detect, identify, and if necessary, jam a drone's communication signals, AUDS shows the greatest potential to secure large areas from unwarranted drone activity.⁴¹ Until US laws regarding jamming technology are changed, however, AUDS will not be an option for facilities such as the Port of Opal City.⁴²

Proposed Solutions and Conclusion

The Port of Opal City is currently pursuing legal options designed to restrict drone takeoffs and landings on port property. Because the FAA regulates the entirety of the US national airspace system, this may be the best regulatory option for the Port of Opal City to pursue at this time. A secondary policy option would be for the port to take advantage of existing FAA guidance, which mandates that drone operators receive permission from all nearby heliport operators prior to operating their craft on or near the port facility.⁴³ While there are numerous qualifying heliports within the designated two-nautical-mile radius of the Port of Opal City, there are currently no sUAS regulations mandating such permission, contrary to the guidance provided on the FAA's website.

At the present time, the largest regulatory hurdle the port must overcome prior to using any of the countermeasures described earlier are the legal protections given to drones by the FAA. Because all drones are classified as aircraft, they are protected from "sabotage" in any form, and knocking a drone out of the sky via projectile, net, or bird of prey qualifies as sabotage under existing law.⁴⁴ Given that AUDS uses a combination of proprietary cybernetic countermeasures and is designed to be used at airports in the near future, such facilities will need to receive special legal permission prior to deploying the AUDS's jamming technology. An argument can therefore be made that, due to the economic importance of the port, it should receive similar legal protection and the right to strategically deploy the AUDS technology for its own protection. It is highly recommended

“
THREE PRIMARY
CYBERNETIC
SOLUTIONS ARE
SPOOFING, HACKING,
AND JAMMING.”

that the Port of Opal City pursue legislation at the federal level that would give it and all other critical infrastructure facilities the right to use either cybernetic countermeasures or the AUDS.

As with any developing technology, drones can be used as either a benefit or a detriment to society. Drones empower the private citizen to reach areas that were previously inaccessible and to deliver goods in highly unconventional ways. The SPE Risk Assessment of the Port of Opal City reveals that critical infrastructure sites are strikingly vulnerable to both deliberate and accidental drone incidents and that such exposure will only increase over time. It is imperative that both civilian and military security officials are aware of and have access to the tools necessary to safely and legally combat this developing threat. On the ever-changing battlefield against modern terrorism, attacks that are prevented due to strategic forethought and the implementation of proper security countermeasures are rarely accounted as victories. Taking proactive steps to mitigate the quickly emerging threat of drones will help to ensure the security of critical infrastructure sites and the vital services that such assets provide to society. ❖

ABOUT THE AUTHOR

John J. Caton works in the Homeland Security sector of the Cadmus Group.

Copyright 2017, John J. Caton. The US federal government is granted for itself and others acting on its behalf in perpetuity a paid-up, nonexclusive, irrevocable worldwide license in this work to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the US federal government. All other rights are reserved by the copyright owner(s). Foreign copyrights may apply.

NOTES

- 1 "49 U.S. Code § 40102—Definitions," Cornell University Law School, n.d.: <https://www.law.cornell.edu/uscode/text/49/40102>
- 2 H.R. 95, 112 Cong. (2012) (enacted). Section 331.
- 3 H.R. 95, 112 Cong. (2012) (enacted). Section 331(6).
- 4 All data was gathered from "Drones," Specout, n.d.: <http://drones.specout.com/>, and it is accurate as of July 2016. All figures and rankings are liable to change with manufacturer changes and further consumer testing.
- 5 "Autonomous Aerial Vehicle," Ehang 184, 2016: <http://www.ehang.com/ehang184>
- 6 DroneDeploy, *Commercial Drone Industry Trends* (August 2016): http://cdn2.hubspot.net/hubfs/530284/White_Papers/Commercial_Drone_Industry_Trends_Report_Aug_16.pdf
- 7 The Federal Aviation Administration (FAA) is an agency under the US Department of Transportation and is responsible for regulating the use of US airspace.
- 8 "SPE Risk Assessment Model Work Sheet," US Coast Guard, n.d.: <https://www.uscg.mil/hq/nswfweb/foscr/ASTFOSCRSeminar/Presentations/Safety/SPERISKASSESSMENTMODEL.pdf>
- 9 Mamta Badkar, "Strikers Have Shut Down Two of the Most Important Economic Gateways in the World—And It's Costing the US Billions," *Business Insider*, 3 December 2012: <http://www.businessinsider.com/economic-impact-of-la-and-long-beach-port-strikes-2012-12>
- 10 Mike Obel, "Longshoremen's Strike at Port of NY and NJ Could Devastate US Economy; But Can Labor and the ILA Finally Win One?" *International Business Times*, 5 December 2015: <http://www.ibtimes.com/longshoremens-strike-port-ny-nj-could-devastate-us-economy-can-labor-ila-finally-win-1040290>
- 11 Charles Meade and Roger C. Molander, *Considering the Effects of a Catastrophic Terrorist Attack* (Santa Monica, Calif.: RAND, 2006): http://www.rand.org/content/dam/rand/pubs/technical_reports/2006/RAND_TR391.pdf
- 12 Ibid.
- 13 Ibid.
- 14 Roger Schaufele, *FAA Aerospace Forecast: Fiscal Years 2016–2036* (Washington, D.C.: Federal Aviation Administration, 2016): http://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2016-36_FAA_Aerospace_Forecast.pdf
- 15 "Drone Close Calls with Airliners Surged in 2015," *Newsmax*, 29 March 2016: <http://www.newsmax.com/Newsfront/drones-airlines-close-calls-FAA/2016/03/29/id/721290/>
- 16 Keith Laing, "Drone Operators Bristle at Feds' Tracking of 'Close Calls' with Planes," *The Hill*, 31 August 2015: <http://thehill.com/policy/transportation/252358-drone-users-bristle-at-federal-close-call-tracking>
- 17 Ralph Avellino and Gilad Shiloach, "Video: ISIS Uses Drones in Oil Refinery Assault," *Vocativ*, 17 April 2015: <http://www.vocativ.com/world/isis-2/isis-using-drones-in-iraq/>

- 18 Caleb Weiss, "Islamic State Releases New Video from the Baiji Oil Refinery," *Long War Journal*, 30 April 2015: <http://www.longwarjournal.org/archives/2015/04/islamic-state-releases-new-video-from-the-baiji-oil-refinery.php>. Note that the video itself has been removed from the article.
- 19 Sarah Berger, "Mexico Drug Trafficking: Drone Carries 28 Pounds of Heroin across Border to US," *International Business Times*, 13 August 2015: <http://www.ibtimes.com/mexico-drug-trafficking-drone-carries-28-pounds-heroin-across-border-us-2051941>
- 20 Oscar Lopez, "Mexican Drug War News: DEA Reveals Cartels Use Drones to Transport Drugs from Mexico into US," *Latin Times*, 10 July 2014: <http://www.latintimes.com/mexican-drug-war-news-dea-reveals-cartels-use-drones-transport-drugs-mexico-us-190217>
- 21 Scott Malone, "Moroccan Man Arrested in Connecticut after School Bomb Plot: Officials," Reuters, 8 April 2014: <http://www.reuters.com/article/us-usa-connecticut-drones-idUSBREA371B220140408>
- 22 Michael S. Schmidt and Eric Schmitt, "Pentagon Confronts a New Threat from ISIS: Exploding Drones," *New York Times*, 12 October 2016: http://www.nytimes.com/2016/10/12/world/middleeast/iraq-drones-isis.html?_r=0
- 23 "Japan Radioactive Drone: Tokyo Police Arrest Man," BBC, 25 April 2015: <http://www.bbc.com/news/world-asia-32465624>
- 24 Schaufele, *FAA Aerospace Forecast*.
- 25 "Drones Hacking Drones (Part 1), Hak5 1518.1," YouTube video, posted by Hak5, 18 December 2013: <https://www.youtube.com/watch?v=Fk1Bpy5ccPU>
- 26 Andy Greenberg, "Malware Lets a Drone Steal Data by Watching a Computer's Blinking LED," *Wired*, 22 February 2017: <https://www.wired.com/2017/02/malware-sends-stolen-data-drone-just-pcs-blinking-led/>
- 27 Aeronautics and Space, 14 C.F.R. § 1.1 (2017): <https://www.ecfr.gov/cgi-bin/text-idx?rgn=div8&node=14:1.0.1.1.1.0.1.1>
- 28 Federal Aviation Administration, *Law Enforcement Guidance for Suspected Unauthorized UAS Operations* (Washington, D.C.: Federal Aviation Administration, 11 August 2016): https://www.faa.gov/uas/resources/law_enforcement/media/FAA_UAS-PO_LEA_Guidance.pdf
- 29 "Falconry License," California Department of Fish and Wildlife, n.d.: <https://www.wildlife.ca.gov/Licensing/Falconry>
- 30 Mindy Weisberger, "Drone-Hunting Eagles Can Snatch Devices Out of the Sky," CBSNews, 8 February 2016: <http://www.cbsnews.com/news/drone-hunting-eagles-can-snatch-the-devices-out-of-the-sky/>
- 31 See, for example, "Evaluation Process of California Falconry Regulations," California Department of Fish and Wildlife, n.d.: <http://www.dfg.ca.gov/wildlife/falconry/>
- 32 "Negligent Discharge of a Firearm, [California] Penal Code 246.3 PC," Shouse California Law Group, n.d.: <http://www.shouselaw.com/pc246-3.html>
- 33 Kelsey D. Atherton, "SkyWall Is a New Anti-Drone Net Bazooka for Police," *Popular Science*, 7 March 2016: <http://www.popsoci.com/skywall-is-an-anti-drone-net-bazooka>
- 34 Martyn Williams, "This Japanese Security Drone Will Chase Down Intruders," *PCWorld*, 11 December 2015: <http://www.pcworld.com/article/3013810/security/this-japanese-security-drone-will-chase-intruders.html>
- 35 Sean Kilcarr, "Telematics Hacking: Three Things You Need to Know," 3 September 2015: <http://fleetowner.com/technology/telematics-hacking-three-things-you-need-know>
- 36 Chris Opfer, "Can You Hack a Drone?" How Stuff Works, n.d.: <http://computer.howstuffworks.com/hack-drone.htm>
- 37 "US Hacking Laws," Hacker Law, 15 February 2015: http://www.hackerlaw.org/?page_id=55
- 38 Keith Wagstaff, "Can Police Protect Their Drones from Hackers?" NBC News, 13 April 2016: <http://www.nbcnews.com/tech/security/can-police-protect-their-drones-hackers-n553026>; Daniel Shepard, Jahshan A. Bhatti, and Todd E. Humphreys, "Drone Hack: Spoofing Attack Demonstration on a Civilian Unmanned Aerial Vehicle," GPS World, 1 August 2012: <http://gpsworld.com/drone-hack/>
- 39 "Jammer Enforcement," Federal Communications Commission, n.d.: <https://www.fcc.gov/general/jammer-enforcement>
- 40 "FAA Expands Drone Detection Pathfinder Initiative," Federal Aviation Administration, 1 July 2016: <https://www.faa.gov/news/updates/?newsId=85532>
- 41 Ibid.
- 42 "Jammer Enforcement," Federal Communications Commission.
- 43 "Unmanned Aircraft Systems (UAS) Frequently Asked Questions," Federal Aviation Administration, 15 March 2017: <https://www.faa.gov/uas/faqs/>
- 44 "2. Aircraft Sabotage (18 U.S.C. 32)," Department of Justice, n.d.: <https://www.justice.gov/usam/criminal-resource-manual-2-aircraft-sabotage-18-usc-32>; "18 U.S. Code § 32—Destruction of Aircraft or Aircraft Facilities," Cornell University Law School, n.d.: <http://www.law.cornell.edu/uscode/text/18/32>

MAJ Jonathan Nagle, US Army

Fundamentalism: The Branch Davidians and the Islamic State

**A CAREFULLY
SELECTED
CANON FEEDS
THE FUNDA-
MENTALIST
NARRATIVE.**

ON 19 APRIL 1993, A RELIGIOUS SECT KNOWN AS THE BRANCH DAVIDIANS, living near Waco, Texas, became a household name when the world watched live on television as 76 followers died at the hands of the FBI.¹ The FBI described those who died in the inferno as members of a murderous cult who were being manipulated by a religious charlatan and who were committed to violently resisting any intrusions. As investigations unfolded, however, the FBI's narrative increasingly appeared to be inaccurate. The Branch Davidians were not a cult in the vein of Jonestown or Heaven's Gate, as the FBI had described them, but embraced a fundamentalist interpretation of Christian Adventist ideology.² In dismissing their religious nature and labeling them as a murderous cult, the FBI profoundly misunderstood the Davidians and their motivations. Similarly, fundamentalist Muslim ideologies that have taken hold in the Middle East, in the form of ISIS and the Taliban, for example, cannot accurately be characterized as "murderous death cults" or as inherently un-Islamic, as US and other Western policy makers have repeatedly asserted.³ Just as the Branch Davidians espoused an exceedingly fundamentalist interpretation of Christian Adventist thought, ISIS and its unique brand of Salafism represent an exceedingly fundamentalist view of Islamic dogma. If we do not wish to see the tragedy of Waco unfold on the global stage, the United States and its allies cannot afford to make the same mistakes that the US Justice Department made with the Branch Davidians. ISIS's opponents must fully understand the group's fundamentalist motivations in order to effectively counter them.

Definitions: Millennialism and Absolutism and Inerrancy

The paramount defining trait of fundamentalist religious thought is the notion of returning to a "golden age" or a "sacred past," and the assertion that mainstream religion has lost its way and must return to the more righteous days of old.⁴ Based on this conviction, fundamentalist leaders like Branch Davidian David Koresh and Abu Bakr al-Baghdadi of ISIS claim that their teachings are not novel or new in any way. To expose the corruption of the status quo and reinforce their point of view, fundamentalist leaders will often cite strict interpretations of judiciously selected religious texts. A carefully selected canon feeds the fundamentalist narrative, while conveniently ignoring any passages that may contradict it.⁵ For fundamentalists, there is no other way, no acceptable alternative course than this return to the religion's beginnings. In such a worldview, these beliefs and teachings are inerrant and absolute because they derive directly from the source, which is God. To imbue a further sense of urgency, leaders often incorporate millennialist designs into the message, as is apparent with both the Davidians and ISIS. This article examines the fundamentalist attributes of millennialism, absolutism, and inerrancy, and sharp boundaries (between believers and non-believers) in the context of both the Branch Davidians and ISIS.

Millennialism

The Branch Davidians trace their roots to William Miller, the founding father of Adventist thought. Miller's followers believed that scriptures revealed the Christian messiah's return (the Advent) and that the ensuing end of time would occur on 22 October 1844.⁶ When this date came and passed without incident, disillusioned Adventists dispersed throughout the United States, taking their unique brand of Christian millennialism with them. Adventism grew rapidly throughout the United States in the early 1900s, and several distinct branches formed.

One of these sects, the Branch Davidians, attracted committed followers in the early part of the twentieth century by placing notable emphasis on Adventist millennialism in the vein of William Miller's teachings ("Davidian" refers to the founder's belief that he was the manifestation of King David).⁷ Throughout the sect's history, belief that the return of the messiah was imminent was foundational, despite several prophetic disappointments. When David Koresh took over as the sect's leader in 1987, he maintained that only he could anticipate Christ's return. Prophecy and apocalyptic readings from the Book of Revelation and descriptions of the end times dominated the Davidians' beliefs—millennialism provided structure and urgency to all of Koresh's teachings. He and his followers believed that the culmination of their struggles on Earth would usher in the violent end of history, and it was their duty to be ready. To prepare for this impending struggle, the Branch Davidians began amassing a large arsenal of firearms and explosives, which naturally drew the attention of law enforcement and resulted in a forceful confrontation.⁸ Violence is the sought-for and inevitable end of millennial thought, and the FBI brought that fight to the Branch Davidians' front door.

Similar to the Branch Davidians, the Islamic State in Iraq (ISI), forerunner of ISIS, grew as an offshoot of a larger religious movement under the leadership of Abu Omar al-Baghdadi.⁹ Operating against the US-led coalition within Iraq under the auspices of al Qaeda, Baghdadi and his followers began to proclaim an increasingly apocalyptic narrative, resulting in their expulsion from the terrorist group.¹⁰ Abu Omar al-Baghdadi was killed in April 2010, and Abu Bakr al-Baghdadi succeeded him as leader of the ISI. Bakr al-Baghdadi's faction, now known as ISIS, commenced its own brand of jihadist violence, declaring the revival of the mytho-historical caliphate, seizing territory across Iraq and Syria, and expanding its apocalyptic narrative of Islamic renewal and victory over the West. The "end of days" is as eminent to ISIS as it was to the Branch Davidians, and ISIS's role in ushering it in is not any less central to the group's beliefs. In the Syrian town of Dabiq, which it captured in 2014, ISIS eagerly awaited the opening salvos of the battle that would usher in the apocalypse. Citing Islamic prophecy, ISIS believed that Dabiq was where this final battle would take place, despite the fact that it is a small town located amid largely uncontested farmland.¹¹ Every bomb that fell on Dabiq or on surrounding ISIS territory fed the narrative that the final battle was brewing. Just as David Koresh pointed to the FBI's tanks and helicopters amassing outside his compound's walls as the final fulfillment of his prophecy, ISIS points to every violent effort to suppress it as the fulfillment of Qur'anic prophecy, to which it must respond in kind.



William Miller



David Koresh



Abu Omar al-Baghdadi

Absolutism and Inerrancy

David Koresh displayed an amazing depth of knowledge about New Testament scripture and Adventist ideology. He would memorize large portions of scripture verbatim and recite them with remarkable charisma. His followers described an almost hypnotic quality to his sermons.¹² Psychologists Robert Robins and Jerrold Post observed, “Using a unique interpretation of scripture to justify his leadership actions, Koresh systematically developed a closed and controlled social system that required total devotion to his divine personage and enshrined himself as ‘the chosen one.’”¹³

In some of his most controversial teachings, Koresh presented a corrupted interpretation of scripture to justify the taking of many wives, some of whom were children.¹⁴ To question Koresh’s actions, including his sexual misconduct, would be to question the very foundation of Branch Davidian ideology. His teachings were inerrant and absolute, and as such could justify anything that served his church. When critics challenged Koresh, the Davidians dismissed their ideas as a symptom of the secular world, a contagion requiring removal. As Koresh’s teachings increasingly came into conflict with social convention and secular laws, the Davidians withdrew from society, isolating themselves further within the compound near Waco.

“
TO LABEL ISIS AS
UN-ISLAMIC IS
TO COMPLETELY
MISUNDERSTAND
BOTH ITS MOTIVATION
AND MALEVOLENCE.”

While ISIS is operating on a much larger scale than the Davidians, its fundamentalism is not unique in regard to absolutist and inerrant teachings. ISIS has shown the world a degree of cruelty not seen since the Middle Ages: weaponized rape, child brides, mass beheadings, punitive amputations, legalized slavery, and systematic genocide are some of ISIS’s more atrocious practices. At first glance, it seems impossible for a rational person to reconcile these actions with any conventional notions of Islamic or Western jurisprudence. Given ISIS’s extreme nature, it is easy to point to these atrocities and declare ISIS to be un-Islamic, a fraud, a religious façade meant to conceal self-serving attempts to expand power at enormous human cost. While certainly ISIS has attracted its share of self-serving adventurers, its leaders have carefully selected Qur’anic scriptures to justify their actions.¹⁵ ISIS members not only claim that slavery and rape are acceptable, for example, they go so far as to claim that rape is pleasing to God. According to a report in the New York Times, ISIS rapists pray before raping, rape, and then pray after raping. They are not praying for forgiveness; rather, the rape is part of the religious ritual that is supposed to please God.¹⁶ Something as universally condemned as rape is consistent with Salafi interpretations within the realm of ISIS’s absolutist inerrancy. To label ISIS as an un-Islamic movement motivated only by egregious rapacity is to completely misunderstand both its motivation and capacity for malevolence.

Sharp Boundaries

The extraordinary characteristics of millennialism, absolutism, and inerrancy inevitably lead to both an ideological and a geographic separation of fundamentalist movements from their mainstream religious roots. The desire to produce the apocalypse, proclaim extremist ideologies, and decree absolutist theological law is simply incompatible with the conventional world. Fundamentalist movements tend to develop well-defined boundaries between the saved and sinful as one of their critical characteristics. David Koresh found geographic isolation a necessity to cultivate his teachings without outside scrutiny, which led the sect

to relocate to a secure compound near Waco. As the group's theology became increasingly extremist, the enforcement of these physical and psychological boundaries became increasingly militant in nature. To allow the FBI to walk through the front door and violate these boundaries was not acceptable, and the Davidians met the officers with extraordinary violence.

ISIS, on the other hand, does not confine itself to a compound; its territory is vast and until recently was expanding. The boundaries it wishes to erect, however, are not any less absolute or important, just on a much larger scale. On 29 June 2014, Baghdadi declared the Caliphate, a strategic maneuver that not only gave ISIS de jure legitimacy to wage jihad according to Baghdadi's interpretation of the Qur'an, but also promulgated physical boundaries between itself and the rest of the world.¹⁷ ISIS laid claim to its own territory to rally true believers the world over and insulate its fundamentalist ideologies from any moderate Muslim influences.

Recommendations

In the case of the Branch Davidians, the US government descended on the Waco compound with force and began a highly publicized 52-day siege. Koresh explained to his flock that the federal assault was merely the opening volley in Armageddon, the fulfillment of his prophecies, the "opening of the fifth seal," as he called it. The FBI's aggressive response galvanized Koresh's followers by playing directly into his apocalyptic narrative. Fundamentally misunderstanding the Branch Davidians' motivations, the FBI treated Koresh as a hostage taker: they negotiated for the release of his "hostages" while refusing to engage or acknowledge Koresh's fundamentalist ideologies in any way.¹⁸

His followers, however, were true believers, not hostages, and did not want "rescue." Highly respected Adventist scholars offered to speak with Koresh and offered him an alternative interpretation to the Book of Revelation. Koresh responded positively, but the FBI refused to support the effort.¹⁹ Koresh explained to the leaders that he needed more time to finish writing his interpretations of scripture, but again this was something that the FBI would not oblige. Historian Malcolm Gladwell argues that, had the federal forces tactically paused and allowed Koresh to engage other Adventists and further contemplate his situation, his apocalyptic narrative would have unraveled.²⁰ Koresh believed that the armies of Armageddon in the coming apocalypse would not pause for debate or contemplation—they would attack without warning, and the FBI fulfilled his vision. In launching their attack, the FBI could not have more perfectly galvanized the Branch Davidians' fundamentalist beliefs in a fight to the death. To this day, "Waco" is the rallying cry for domestic terror groups in the United States, an illustration of federal overreach, and a case study in law enforcement ineptitude.

The Islamic State has been enjoying a similar kind of ideological galvanization through US policy in the Middle East. The United States and its allies have proclaimed that ISIS is not Islamic, and the coalition's military forces have applied hard power solutions with little effect and varying intensity. Some politicians have called for carpet-bombing, torture, and even nuclear war to combat the fundamentalist group. Like the FBI's attack on the extremist Christians, nothing could more perfectly feed ISIS's fundamentalist Islamic narrative.

“
KORESH EXPLAINED TO
HIS FLOCK THAT THE
FEDERAL ASSAULT WAS
THE OPENING VOLLEY
IN ARMAGEDDON.”

As the FBI learned at Waco, however, there are alternative courses of action to consider. If the United States focused on containing ISIS, while moderate Muslim leadership (particularly Salafi leaders in Saudi Arabia) engaged them ideologically, their apocalyptic narrative would soon unravel. Without an enemy storming into Dabiq and bringing the end times, the extremist notions ISIS harnesses to brutalize its constituents will appear desperate and unwarranted. It may be the long game, but burning down the Middle East with ISIS inside it will only further engender anti-Western extremist ideologies the world over, presenting new threats and inciting further fundamentalist extremism. ❖

ABOUT THE AUTHOR

MAJ Jonathan Nagle is a logistics officer in the US Army.

This is a work of the US federal government and is not subject to copyright protection in the United States. Foreign copyrights may apply.

NOTES

- 1 Malcom Gladwell, "Sacred and Profane: Where the Waco Siege Went Wrong," *New Yorker*, 31 March 2014: 22–28: <http://www.newyorker.com/magazine/2014/03/31/sacred-and-profane-4>
- 2 "Jonestown" refers to a cult called the People's Temple, founded by a charismatic preacher named Jim Jones in 1956. Jones began a settlement, Jonestown, in Guyana in the 1970s, and went there with about 1,000 followers to escape increasingly hostile public scrutiny of Jones's behavior. When US Representative Leo Ryan arrived at Jonestown to investigate reports of abuse, he was murdered, and Jones induced 900 of his followers to drink poison-laced fruit punch, in what became known in the media as the "Jonestown Massacre." See Jennifer Rosenberg, "The Jonestown Massacre," ThoughtCo., updated 6 February 2017: <http://history1900s.about.com/od/1970s/p/jonestown.htm>. Heaven's Gate was a millennialist Christian cult that preached that aliens would lead them to spiritual rebirth. In March 1997, as Comet Hale-Bopp approached Earth, cult leader Marshall Applewhite and 38 followers committed suicide in the apparent belief that the comet hid a spaceship that was coming to take them to their next existence. See "1997: Heaven's Gate Cult Members Found Dead," History.com, n.d.: <http://www.history.com/this-day-in-history/heavens-gate-cult-members-found-dead>
- 3 Gabriel A. Almond, R. Scott Appleby, and Emmanuel Sivan, *Strong Religion: The Rise of Fundamentalisms around the World* (Chicago: University of Chicago Press, 2003), 96.
- 4 Ibid., 93.
- 5 Ibid., 95.
- 6 "Branch Davidians: History, Beliefs, and Practices," ReligiousTolerance.org, updated 19 April 2003: http://www.religioustolerance.org/dc_branc1.htm
- 7 See "The Branch Davidians," Christian Research Institute, n.d.: <http://www.equip.org/article/the-branch-davidians/>
- 8 "Branch Davidians: History, Beliefs, and Practices."
- 9 William McCants, "'The Believer': How an Introvert with a Passion for Religion and Soccer Became Abu Bakr Al-Baghdadi, Leader of the Islamic State," Brookings, 1 September 2015: <http://csweb.brookings.edu/content/research/essays/2015/thebeliever.html>
- 10 Ibid.
- 11 Graeme Wood, "What ISIS Really Wants," *Atlantic Monthly*, 15 March 2015: <https://www.theatlantic.com/magazine/archive/2015/03/what-isis-really-wants/384980/>. Dabiq was retaken from ISIS by Syrian rebels in October 2016.
- 12 Gladwell, "Sacred and Profane," 23.
- 13 Robert S. Robins and Jerrold M. Post, *Political Paranoia: The Psychopolitics of Hatred* (New Haven, Conn.: Yale University Press, 1997), 127.
- 14 "Branch Davidians: History, Beliefs, and Practices."
- 15 Wood, "What ISIS Really Wants."
- 16 Rukmini Callimachi, "ISIS Enshrines a Theology of Rape," *New York Times*, 13 August 2015: <https://www.nytimes.com/2015/08/14/world/middleeast/isis-enshrines-a-theology-of-rape.html>
- 17 Wood, "What ISIS Really Wants."
- 18 Gladwell, "Sacred and Profane," 26.
- 19 Ibid., 28.
- 20 Ibid.

Adapting CT Strategies to Combat Organized Crime Gangs

*MAJ Anders Westberg, Swedish
Special Operations Command*

LIKE THE EMERGING THREAT OF HYBRID WARFARE, WHICH BLURS THE lines between state-sponsored aggression and insurgency, the delineation between criminal organizations and terrorist organizations can be hard to distinguish. Networked organized crime organizations, such as criminal motorcycle gangs (CMGs), are more similar to terrorist organizations than they are different. The incentives for their activities are the main difference between CMGs and terrorists; for instance, biker gangs primarily want money and prestige, while terrorists want political change. Because of these similarities, an analytical model of the kind used by security analysts to assess the relative strengths and weaknesses of terrorist groups can help explain how criminal organizations, law enforcement agencies, and other critical players interact.

Law enforcement agencies and military organizations also share many similarities. Both organizations can learn from each other: one Swedish criminal intelligence department, for example, used a combined approach with some success in one of Sweden's police counties.¹ In the end, the military and police both have the authority and responsibility to use violence as a last resort to protect their societies in this ambiguous hide-and-seek threat environment. The legality of using the military in a domestic situation varies from country to country, but with some minor adjustments and in collaboration with the rest of the community, law enforcement and military organizations can be strengthened to deal with present and future threats. This article explores Sweden's evolving efforts to combat CMGs with the help of military analytical tools and looks at whether Sweden's experience can serve as a model not only for other countries that are fighting organized crime but also for countering terrorist networks.

A New Threat Reaches Sweden

Twenty-five years ago, no one anticipated the startling level of organized criminal activity that would exist in Sweden today. As a result of the growth in organized crime, the police and civil authorities have to be continually reactive, focusing on crimes that have already been committed and on investigating and arresting individuals rather than taking the time to look into each criminal organization as a whole. The situation began in the early 1990s, when the so-called "1%" motorcycle gangs first took root in Sweden. (The gangs took the label "1%" to declare their outlaw status, as opposed to the "99%" of motorcycle riders who are law-abiding.) Today the CMGs lead by example and demonstrate the possibilities of networked organized crime for newer gangs.

Because Sweden had no criminal and police intelligence structures at the local or regional levels in the early 1990s (apart from the civilian security service), law enforcement authorities and policy makers had no tools for understanding this new type of crime network through situational awareness and intelligence development. Law enforcement is focused mainly on petty crimes, burglary, theft, narcotics, and robbery. An established criminal intelligence structure could

**CRIMINAL
MOTORCYCLE
GANGS ARE
MORE SIMILAR
TO TERRORIST
ORGANIZA-
TIONS THAN
THEY ARE
DIFFERENT.**





have anticipated the rise in criminal gang activity and helped Sweden address the problems before they grew out of hand. Sweden was not prepared to face this new threat when it first appeared, so authorities are still “playing catch up” and focusing on repressive strategies while public safety continues to decline.²

Characteristics of the Criminal Motorcycle Gang Hells Angels

Organized crime can be said to live off society by offering the public high-demand goods and services that the government wants to ban or regulate. These include alcohol, cigarettes, drugs, prostitution, pirated media, cheap or black market labor, real estate, and transport.³ Like other businesses, organized crime groups such as the CMGs do not prosper in a society in chaos. The gangs are not trying to break down society but work, instead, to undermine or disrupt its legal framework and shift economic activities in a direction that favors their interests and promotes their primary sources of income.⁴ The Hells Angels organization operates as a successful transnational and stateless network. It is composed of members who have made a pledge of loyalty to a certain “brand” and franchise and who share a set of beliefs and unity of purpose. The organization depends on status, loyalty, identity, and an alternate way of life; and it preserves its own internal social safety net. This self-contained structure can severely undermine a “host” nation’s legitimacy and authority, as well as the rule of law.⁵

In a 2014 study, crime analyst Alexandra Jones compared Europe’s CMGs with jihadist groups. She noted, “As it is the nature of street gangs and jihadists to strive for control over territory, they look to control not just hearts and minds but actual neighborhoods on which they will impose their own rules and where they can stave off fiscal and judicial intervention.”⁶ Hells Angels is known for its use of fear and intimidation to achieve its goals.⁷ New members undergo rigorous screening and indoctrination, and they have to work their way up in the organization by earning respect.⁸ Like many jihadist organizations, once someone is accepted into Hells Angels, he can almost never leave. The organization’s management philosophy is to centralize decision making and decentralize action. Hells Angels has several chapters, or “charters,” each of which has a small core leadership that controls an organizational structure along the lines of a business enterprise. On average, a charter needs to have at least six members, including a president, vice president, secretary, treasurer, sergeant-at-arms (responsible for security), and road captain. The illicit income-making activities are conducted mainly by constellation cells, consisting of one or more members who work with people outside the group.⁹ There are often some supporters and followers connected to each cell who provide services such as logistical support, recruitment, various kinds of subject matter expertise, financial support, intelligence, manpower, and safe havens.

Because of the tight control that the Hells Angels leadership exerts over its members, it is harder for law enforcement officers to penetrate and gather incriminating evidence from the Hells Angels organization than it is to gather intelligence about them.¹⁰ The gang’s reputation for being fearless and violent is strengthened by a “noble outlaw” myth similar to Robin Hood and other underdog storylines. This myth is often enhanced by the media and the promotional efforts and marketing of the organization itself. Local affiliated CMG groups usually act in the name of the Hells Angels brand to bolster their own reputations. From this description, it becomes apparent that many features of the motorcycle gang are remarkably similar to those of a modern terrorist organization.

The Swedish Story

How did Hells Angels gain such a strong foothold in Sweden? Sweden is roughly the size of the state of California in area (450,296 square kilometers) and currently has a population of nearly 10 million people. When Hells Angels first took root in Sweden at the beginning of the 1990s, its members fought a violent turf war (known as the Nordic Biker War, 1992–1997) with the Bandidos motorcycle gang.¹¹ Hells Angels prevailed due to its tight organizational structure and its extensive network of contacts with similar gangs throughout Sweden and the world.¹² Eventually, however, the clubs struck an uneasy truce and divided the Swedish “market” by both geography and criminal domains. Hells Angels remains the top-tier organized crime operation in Sweden.¹³ There are now 14 Hells Angels charters and eight supporting charters, called the Red Devils, located along main highways and roads across Sweden. A step below the Red Devils are a number of support gangs named the Red & White Crew. Due to this hierarchical structure of proxies and supporters, the core members of a Hells Angels chapter do not need to be directly involved in criminal activities, and the chapters themselves have deniability. These lower-tier affiliates also offer alternative ways for new recruits to join a Hells Angels charter in the hopes of eventually becoming “full-patch” members.¹⁴

Today, shell companies controlled by the club launder money, and the organization has managed to intermingle the black market with the white market (for instance, through transportation and construction companies), which means that the normal citizen is often indirectly and unwittingly supporting criminal activity.¹⁵ The Swedish government loses about US\$8 billion each year in tax income because of the black market in Sweden, and Hells Angels controls a significant portion of that market.¹⁶

The Hells Angels have also created a system of executive control over other gangs. That is, if an ordinary motorcycle club wants to have its own patch and wear a vest, this first needs to be approved and sanctioned by the Hells Angels organization. Indirectly, Hells Angels controls the biker culture and some of the more than 300 ordinary motorcycle clubs in Sweden that don’t necessarily have anything to do with either criminality or the Hells Angels organization. These biker clubs, however, are a perfect recruitment source (although far from the only source) for Hells Angels and its affiliates. This system of oversight allows recruits, prospects, and hangers-on to be vetted several times before they become full-patch members.¹⁷ Today, there are nearly 170 full-patch members and 250 supporters of Hells Angels in Sweden.¹⁸

Further Diagnostics: The Current Situation

In a 2014 lecture, Professor Gordon McCormick of the US Naval Postgraduate School stated that “Sweden has become tolerable to the intolerable.”¹⁹ To a certain extent, this is true. The Hells Angels organization has acted as a vanguard of organized crime in Sweden by taking advantage of the weakness of Sweden’s legal system and the absence of anti-gang laws. Liberal democracies like Sweden can have difficulty turning to violent and repressive means to combat criminality and other societal disruptions, including civil unrest.²⁰ The CMGs’ activities have created a void in society because policy makers and law enforcement agencies have lost the initiative in controlling them. Sweden lacks a comprehensive “whole of society” strategy or approach to organized crime. In short, although gangs are





committing crimes that affect normal citizens, a judicial process and adequate laws for combating these gangs are still missing. This void is currently being exploited by new criminal gangs that have lowered the threshold for using violence and intimidation in their activities. Consequently, there have been increased incidences of shootings and other violent crimes in the cities of Gothenburg, Malmö, and Stockholm.²¹ The situation, as it is being reported in the media, has caused concern in Europe and elsewhere. Some German authorities have commented on the need to combat these criminal organizations and create strong laws to avoid becoming “like Sweden.”²²

Organized crime gangs pose a clear and present threat to Swedish society—a threat that has largely been overlooked due to compartmentalization within the country’s police and government agencies, inadequate criminal policies, lack of an intelligence structure, and fiscal austerity.²³ Just over 20,000 police officers are divided among 25 counties in Sweden.²⁴ Because of shift work, at the most, 8,000 uniformed police officers can be on the streets of the entire country at any given time. Sweden, with a population of 9.6 million, has, on average, 206 police officers per 100,000 residents.²⁵ By comparison, Germany fields 300, and the EU averages 350 officers per 100,000 people.²⁶

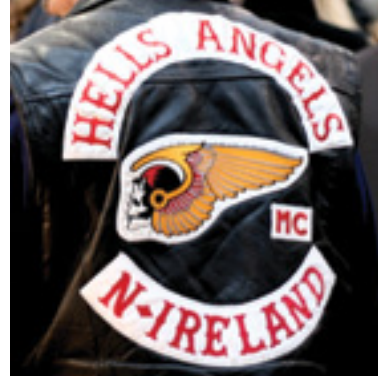
Sweden’s low ratio of police to citizens might be acceptable if a high percentage of the citizens were law abiding, but this may not be the case. Värmland County, for instance, constitutes 4.3 percent of Sweden’s territory, nearly the same size as New Jersey or Massachusetts. In 2006, roughly 420 police officers were assigned to Värmland County, which meant that, on average, five or six patrol cars, with two police officers in each car, were on patrol at night.²⁷ At the same time, the county’s Criminal Intelligence Department had just one analyst working less than full-time on all CMGs in Värmland County. By comparison, Hells Angels, its affiliates, and hangers-on had about 20 people directly involved in criminal activity in the county, apart from the activities of other gangs active in Värmland. Hells Angels and other criminal gangs operating in Sweden had a distinct advantage over law enforcement, not only in terms of numbers of members but also in their ability to choose the time and place for their

activities. The gangs can choose whether to concentrate their efforts in a given sector, such as bringing drugs into one area, or whether to spread out the activity to avoid detection, depending on the presence of law enforcement and the gang’s needs.

Hells Angels, along with other crime organizations, is considered by Sweden’s law enforcement agencies to be a “system-threatening organization.”²⁸ The Swedish judicial system is especially at risk. In 2003 and 2004, Swedish authorities took actions to combat serious crimes related to the motorcycle gangs and others. In response, the targeted gangs used tactics of intimidation, including the use of violence; blackmail; and the stalking of not only judges, police officers, lawyers, jurors, prosecutors, and witnesses but also family members and other relatives of the gangs’ targets.²⁹ In effect, the entire Swedish judicial system has been under threat from members or affiliates of these criminal organizations. Prosecutors and judges have been reluctant to present or decide cases. It has also become more difficult to gather useful evidence from witnesses, investigate crimes, and prosecute criminals. Intelligence by itself is rarely admissible in court, although intelligence can sometimes be turned into evidence if needed.

This means that a slower decision-making loop obstructs the judicial processes, which leads to confusion and insecurity. In this climate, there is potential for bribery and corruption, which historically have been hard to prove. These crimes against societal institutions, such as the judiciary, can drive a wedge through society and create even more space in which criminals can maneuver. In other words, the pressure gangs put on the judicial system can serve as a foundation for widespread corruption among public officials.³⁰

Sweden’s public and private organizations and entities, such as the police force, schools, local communities, social services, and commerce, are compartmentalized. That is, they work in a stove-piped manner and normally do not exchange strategy and information. Local institutions and political parties often support different law enforcement policies and goals, but the nation’s police force is commanded and controlled at the national level. These factors are hurdles to the development of a comprehensive strategy to combat crime.



Because Sweden's citizens enjoy the right to freedom of association, neither the state nor other authorities (such as employers) may either compel or prevent a citizen's association with a legitimate individual or entity of his or her choosing. The main policy argument against use of the judicial process to curtail gang activity is that, although members of a motorcycle gang may commit crimes, this does not make the whole club or association criminal. Thus freedom of association has precedence over law enforcement, which makes it hard to create laws that target these groups, or to argue against the establishment of new CMGs in Sweden. These legal obstacles also limit cooperation between law enforcement agencies and civilian authorities, and undermine the police's ability to operationalize any anti-gang strategy. In general, the civilian police do not want to comment on or discuss the criminal motorcycle clubs, which makes it difficult for the country to engage in an open debate about this criminal activity, collect intelligence, or conduct what the military calls information operations.³¹

Swedish law enforcement authorities did not have a criminal intelligence organization in the late 1990s when the biker gangs were spreading. Investigations were performed in an ad hoc manner. The first criminal intelligence units stood up nearly eight years after the start of the Nordic Biker Wars in 1992, but a domestic national intelligence model was not introduced until 2006. Sweden's military, like most others, has always had some intelligence apparatus and processes to develop estimates, so the police were able to adopt some processes and techniques from military intelligence doctrine.

FREEDOM OF
ASSOCIATION HAS
PRECEDENCE OVER
LAW ENFORCEMENT.

A Comparison of Sweden's Law Enforcement Organization and Its Military

In most democratic countries, the police forces and the military are symbols of government control and the guardians of civil society. While the two sectors support each other to some extent, there are some important differences between them, as shown in figure 1. Most significantly, law enforcement focuses on internal, domestic threats while the military focuses on external threats to the nation-state. A police officer can work his or her entire career in the same district, which imparts a profound situational understanding that military personnel rarely enjoy. In recent times, many countries' armed forces have been used in out-of-area roles (e.g., in Afghanistan) and thus have developed an expeditionary mindset. Moreover, the military is known for planning and for having contingencies, while law enforcement's core activity is responsive in nature. If there is no crime, then law enforcement does not need to respond beyond the routine activities of protecting and serving. The military necessarily has a large support and command and control structure, while law enforcement uses a rather static infrastructure.

One major structural difference is that law enforcement officers perform their duties in small teams, pairs, or even as individuals, while the military works in

much larger formations and units. Police units are more geographically focused and concentrate on their jurisdiction over a much longer period of time than military units. The military uses targeting practices that aim to defeat, destroy, or neutralize the enemy or a subsystem of targets. These targets can be individuals or organizations, or they may be material, structures, and equipment. Conversely, law enforcement focuses almost entirely on the individual perpetrator or a relatively small group (see figure 1). As they go about their ordinary lives, citizens may occasionally see or interact with the military, but law enforcement is an intentionally visible part of civil society.

The role of the judiciary and rules of evidence are quite different for law enforcement and military personnel. Police investigations must be careful, thorough, and detailed enough that their results can be presented in a court of law. Law enforcement officers may be required to testify publicly in a courtroom. In contrast, this level of constraint on detail and procedure does not normally apply to military personnel.

Analysis: Integrating It All

This section uses some common military analytical models, including Center of Gravity (CoG) analysis and Strength, Weaknesses, Opportunity, and Threat (SWOT) analysis, to produce a comprehensive theoretical description of the criminal biker organizations that are the subject of this article. Military assessment models like CoG analysis and SWOT analysis had not been invented at the time the gangs first became a serious threat, but they may be useful for controlling them in the future. It is vital for states and their security apparatus to be very clear about what law enforcement organizations and the judiciary can and cannot do within the law and still win the conviction of a criminal. When it comes to international criminal networks like the CMGs, the government's alternatives and possibilities are even harder to define because different countries have different problems, laws, and approaches to security. Meanwhile, outlaw biker gangs continue to take advantage of this legal vacuum and disregard national borders.³²

Figure 1. Differences between Law Enforcement and Military Organizations

LAW ENFORCEMENT (LE)	MILITARY OPERATIONS	COMMENTS
Works locally, at municipal and county levels	Expeditionary, operates out of home region	Expeditionary warfare has been the norm of Western forces over the last few decades. Normally, the military is focused on external threats and LE domestic threats.
Generally supports domestic culture and norms	Operates in and supports foreign cultures	LE know the terrain they work in. More often than not, the terrain is unfamiliar in military operations.
Reactive, first responders to crises	Pre-planned strategies and operations	
Close to, works with emergency services	Operates in remote areas, relies on in-house medics on various levels	
Established communication structure	Expeditionary and adaptive	
Evidence and investigation-led, supports judicial processes	Intelligence-led/intelligence driven	
Rule of law	Laws of armed conflict, OP-plans and OP-orders with rules of engagements	
Small patrols (individuals/pairs/teams)	Larger formation-sized units	SOF usually operate in small numbers. Conventional forces tend to operate in platoon- or company-sized and even bigger formations. Support and sustainment requirements are enormous compared with LE.
Typically focused on individual criminals	Typically targets organizations and systems	Military organizations sometimes target individuals, and can also target other parts of a system, including communications, roads, power, infrastructure.
Criminal usually has an interest in money and/or power	Opponent has political and financial interests; military has security interest	
Role is to investigate, protect, arrest, and convict	Role is to destroy, defeat, degrade, and neutralize	Security and peacekeeping are important to LE. Fire power and armed response are important in military operations.

One of the chief contributions a military-style threat assessment can make to law enforcement is that the assessment considers both “Red” side (enemy) and “Blue” side (friendly) actions and capabilities, rather than focusing solely on the opponent. This Red-versus-Blue comparison is necessary for law enforcement personnel to confront organized criminal activity. The need for legitimacy in gathering evidence for prosecution and for various anti-gang laws, is also an important consideration when states are trying to deal with violent non-state actors.

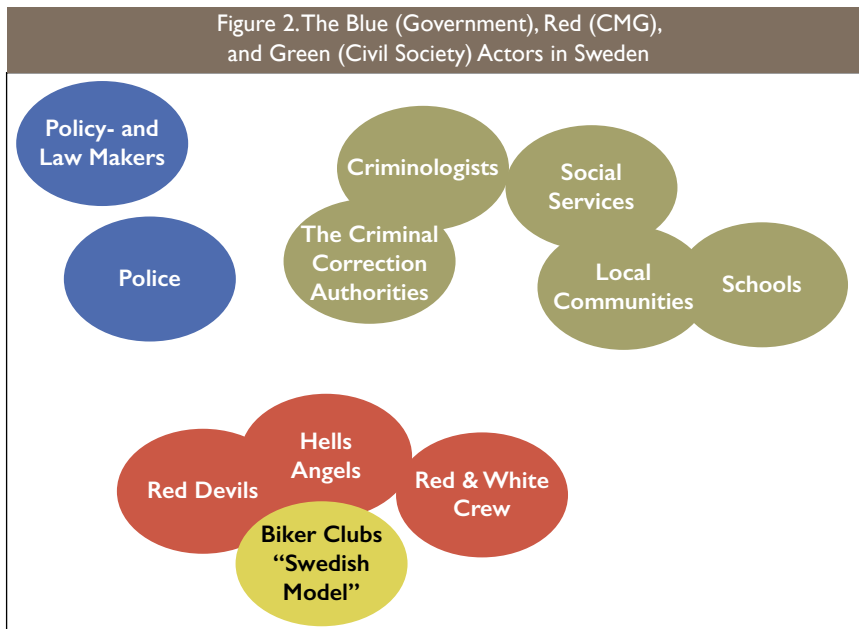
This analysis focuses more on areas of “relative power” such as mind-set, abilities, and views than would a typical military force-on-force comparison. The main goal is to identify the strengths and weaknesses of the government’s legal and security structures and civil society groups and institutions. Once these values have been identified, they are compared against the strengths and weaknesses of the criminal gangs; the findings will give the Swedish government the information it needs to operationalize the most suitable and viable actions to combat these criminal organizations. Normally, law enforcement agencies and the military in Sweden do not work together against a domestic threat. The military’s analytical methods and experiences from policing operations in the Balkans, Afghanistan, and elsewhere, however, could readily support the Swedish police agencies through a military assistance program.³³

The problem for Sweden’s law enforcement community is not the typical law enforcement problem of simply finding the criminals; the police understand what the criminal networks are doing today and how they work.³⁴ Law enforcement generally takes three approaches to ensure community safety: education, prevention, and enforcement. All three approaches should be used in combating both criminal networks like the CMGs and terrorist networks. The criminal and police intelligence on gang activity is credible, and the motorcycle clubs, charters, members, and associates have already been well mapped-out through a social network approach. Several criminologists in Sweden have also sufficiently analyzed and explained the main underlying causes of the gangs’ spread.

Reliable information about the gangs’ future intentions, however, is the most difficult intelligence to collect and confirm. The biggest obstacle to prosecution, given Sweden’s legal environment, is finding the *evidence*—as compared to *intelligence*—that will win convictions in court. In law enforcement, intelligence is normally used to point to evidence, but because intelligence often lacks detail or sufficient proof, it often may not be used as evidence in a court of law. Moreover, the police continue to focus on the individuals and not the organization.³⁵ The underlying reasons why individuals join gangs and why gangs spread are complex and usually outside the responsibility of law enforcement. To develop a comprehensive “whole of society” approach to combating criminal or terrorist networks, analysts need to put more effort into considering and assessing not only the

RELIABLE
INFORMATION ABOUT
THE GANGS’ FUTURE
INTENTIONS IS THE
MOST DIFFICULT
INTELLIGENCE
TO COLLECT
AND CONFIRM.

Figure 2. The Blue (Government), Red (CMG), and Green (Civil Society) Actors in Sweden



Blue side but also the “Green” side—social services, schools, local communities, and other societal/environmental factors. Figure 2 illustrates some of these relationships. The proximity of the ovals in the illustration reflects the relative, approximate, and estimated closeness of the various actors to one another.

An analysis of three key factors for each sector—in this example, foundation, characteristics, and organizational structure—reveals that there are some critical capabilities and requirements that are vital for the government to protect, such as free and independent elections and access to high-quality education (see figure 3). Normally, a military assessment is limited to the opponent and one’s own organization, for comparison. A law enforcement assessment, however, also needs to include the civil society and the impact it can have on developing a working comprehensive strategy.

Once an analysis has outlined the key factors for a sector/organization, the CoG model will help to identify both critical capabilities the sector/organization

Figure 3. Key Factors for Each Sector of Civil Society

	BLUE LAW ENFORCEMENT/POLICE	RED HELLS ANGELS	GREEN CIVIL SOCIETY
FOUNDATION	Engaged with community, available, lawful; requires legitimacy; works to protect, reduce crime, investigate and gather evidence; provides safety, service	Unlawful, money-driven, chartered, motorcycle-centered culture; promotes mythology, alternative lifestyle, active membership, freedom, pop culture, strong identity	Public service, official structures, education, local power and authority, rule of law
CHARACTERISTICS	Educated, trained, heterogeneous, visible, uniformed, cooperative, responsible, event driven, diverse, reactive, rule constrained; motivated by status and pride; locality-based	Homogenous, networked, adaptive, opportunistic, unafraid, resilient; depends on rapid and controlled expansion; motivated by status, loyalty, respect, and prestige; locality-based	Subject matter experts, knowledge-based, locality-based
ORGANIZATION STRUCTURE AND DESIGN	Hierarchical, networked, dispersed within locality, regulated, bureaucratic, career-oriented closed fraternal system; access to resources, regulated administration, multi-spectrum operations/responsibilities	Career-based, centralized decision-making, decentralized execution of operations, organized/structured hierarchy; seeks resources, supporters, opportunity, affiliates	Departmentalized structure, compartmentalized activities, administrative hierarchy
OTHER		Exploits gaps in legal system; defies society and judiciary indirectly and directly	

Figure 4. Center of Gravity Analysis: Blue and Red

	BLUE	RED
DESIRED END STATE	A prosperous and independent country	Independent and alternative lifestyle free from civil authority
CENTER OF GRAVITY	Democracy by election, supported by rule of law	“Brotherhood” and loyalty
CRITICAL CAPABILITIES	Law enforcement, independent judiciary, law-abiding citizens, rule-based honest governance, taxation, free elections, social security network, open independent media, mass access to education	Internal law enforcement, structure, property/territory, respect, freedom of choice, motivate and influence insiders/outside, decision making
CRITICAL REQUIREMENTS	Laws, professional educated police force and judicial system, workforce, commerce, jobs, various forms of media, educated population, ability to change and adapt, knowledge, shared values	Charters, minimum hierarchy, male-only membership, recruitment, inducements and control, indoctrination, contacts and support networks, shared values and identity, money, opportunity

needs in order to function and the critical requirements necessary to support those capabilities.³⁶ Using this sort of analysis to understand a CMG's capabilities and requirements has been outside the police's typical focus on individual gang members (see figure 4).³⁷ What is more, with the support of the CoG model, a law enforcement agency can learn critical information about the strengths and weaknesses of its own organization and the society it works within.

To thrive, Hells Angels needs the freedom of action to enforce its internal laws and continue to expand both its membership and the scope of its "business" enterprises. The club's primary method for maintaining discipline and increasing membership is the "stick and carrot," that is, a fluid combination of fear, loyalty, and money. Outlaw biker gangs also need to build and maintain a network for recruitment and to promote their criminal activity (see figure 4).

For an organization to develop a counter strategy, it needs to have a clear picture of the opponent's vulnerabilities and strengths. One way to do this is by using a SWOT analysis once the CoG model has identified critical requirements and capabilities. In this example of the CMGs, the findings show that there are some opportunities for law enforcement to push back against the gangs, but there are also threats that need to be addressed. For example, figure 5 shows that the intimidation of officials by violent criminals can become a threat for both Blue and Green and must be taken into account for the future. The Blue side needs to protect itself from corruption and erosion of the rule of law. The Blue side must also overcome what can be characterized as a lack of political will and create strong criminal laws. The data in the row titled "Opportunity" show that the Blue side has yet to take advantage of opportunities to educate the public and make optimal use of available information and media platforms—credible information about the criminal gangs has to come through the authorities and not just through news stories. The media's information channels, as well as the government's, can be used to discredit CMGs, create a narrative of official fairness and civic lawfulness, and explicitly state what is at stake for the whole of society.

This example shows that use of the media and cooperation between Green and Blue should be exploited as an opportunity to combat CMGs. The lack of political will to change laws in Sweden, along with gray areas of responsibility and institutional stove-piping, make this kind of broad cross-sector cooperation difficult,

**COOPERATION
BETWEEN GREEN
AND BLUE SHOULD
BE EXPLOITED AS
AN OPPORTUNITY
TO COMBAT CMGS.**

Figure 5. SWOT Analysis of Blue, Red, and Green Strengths, Weaknesses, Opportunities, and Threats

	BLUE	RED	GREEN
STRENGTH (INTERNAL)	Legitimacy, resources	Networks, fear, intimidation, loyalty	Subject matter experts, locally integrated
WEAKNESS (INTERNAL)	Compartmentalization, weak political will, poor cooperation, entrenched authorities, stymied lawmaking	Rigid core hierarchy, fragile internal mythology, money-driven, competitive	Administrative, weak management
OPPORTUNITY (EXTERNAL)	Education, media, intelligence sharing	Take advantage of the legal vacuum, low risk/moderate payoff, alliances, expansion	Cooperation, denial of insurance money, attrition, networking
THREATS (EXTERNAL)	Individualism, corruption, alternative living, undermining the law	Weak recruitment, other gangs, cooperation between Blue and Green	Intimidation, corruption

and the police rarely use media or other means of communication to influence or educate civil society. Political hesitancy, overstretched police forces, and slow decision making within law enforcement's leadership are creating a security gap and interfering with the judicial process. Individuals feel insecure when the official strategies that are in place seem faulty or when they don't understand why a disruptive event has taken place. If Red is exploiting weaknesses and undermining rule of law, then Sweden's politicians must do what is necessary to create stronger laws and provide law enforcement with adequate resources to uphold the law.

Blue and Green together must continue to put pressure on the personnel of the Red's core hierarchy. The treasurer and sergeant-at-arms, for example, could be the focus of leadership targeting rather than the president of the club. Normally, the presidents are investigated because they are the "shot callers"—the authorities in charge. The other two roles, however, can be seen as the glue that holds the charter or the club together. Many insights and opportunities for further exploitation can be gained by pressuring and eventually arresting the people in these positions.

Conclusion: Key Takeaways and Suggestions for a Way Forward

Both law enforcement agencies and the military can learn from each other. Using modeling and sharing lessons learned can improve each organization's ability to combat criminal gangs and terrorist organizations respectively. The CoG model can help policy makers clarify a desired end state for their country's civil society and law enforcement and then define the policies they must adopt to reduce the impact of CMGs on society. Aspects of the CoG and SWOT models, along with other military analytical tools, were used with some success in 2006 by a criminal intelligence department in Sweden to identify individuals and subjects for further targeting and investigations. This allowed the police to efficiently redirect needed resources and eventually win a conviction in court.³⁸ At the time, however, Sweden's law enforcement community and its military did not have a common understanding or appreciation for one another. The application of the models in that case was possible because of the personal training and education of this author, not from institutional knowledge. Several years later, however, the author's experiences from working with law enforcement from

2005 to 2006 were improved on and put into effect by the Swedish military.

Sweden now has a national counterterrorism board on which several organizations, including the military intelligence service, hold a seat. However, this working relationship needs further improvement: organizations need to shift their mind-set and recognize that there are analytical models and experiences that can be shared among the intelligence and security services to broaden their institutional knowledge. This will be particularly important in the future if potential and real adversaries erase the borders between terrorism, criminality, and low-level political/military aggression.

**LAW ENFORCEMENT
PERSONNEL SHOULD
HAVE ACCESS TO
EDUCATION AND
TRAINING FROM
THE MILITARY AND
VICE VERSA.**

In Western democracies, there are differences and similarities in the methods governments use to combat terrorist organizations, insurgencies, and criminal organizations. For all of these countries, however, their security services, intelligence services, military organizations, law enforcement agencies, and civilian organizations can all benefit from sharing lessons learned and other information. In multinational military interventions, such as the operations in the Balkans and Afghanistan, the intro-

duction of fusion cells and centers is one useful example of operationalizing unity of effort. Several countries have also established similar centers for domestic security, and it would be wise to continue improving national and international cooperation through policies such as the exchange of law enforcement and military personnel and other governmental officials, multinational training and exercises, and professional education beyond a specific field of expertise. That is, law enforcement personnel should have access to education and training from the military and vice versa. Furthermore, from deployments in Iraq and Afghanistan, Western militaries, especially special operations forces, have developed vast knowledge and experience in law enforcement techniques, such as the importance of site exploitation and biometrics.

For international interventions, the military is also beginning to understand the importance of social network analysis, which can be used with the CARVER (criticality, accessibility, recuperability, vulnerability, effect, and recognizability) targeting system to improve operational outcomes.³⁹ These methods should be further developed. Military planners should develop streamlined approaches for crisis response that will enable forces to react whenever needed. For example, a military unit should be able to go

after a criminal or terrorist target without the usual cumbersome planning and approval processes. This requires military leaders and personnel to develop the mind-set to face unknown situations, similar to the way a police patrol responds to a call of domestic disturbance without knowing the details of the situation or having planned its response ahead of time.

Sweden has taken great strides to combat terrorists. New legislation and directives allow the police to bring in military forces, including SOF, under the control of the law enforcement chain of command, whenever needed, to combat domestic terrorism.⁴⁰ With regard to organized crime and the CMGs, however, this is not the case. The inability of the Swedish judiciary and legislature to operationalize strategies and create bills and laws that adequately address organized crime is obvious not only with regard to the biker gangs; it has also contributed to ineffective efforts to combat Islamic radicalization in Sweden.⁴¹ A perception that the judicial process is not working leads people to ask whether the authorities have the ability to uphold law and order and ultimately challenges the state's capacity to exercise complete sovereignty.

This narrative of weakness can be countered, however, through improved job security, information and education campaigns that target the whole of society, and the use of police forces to combat criminals. A law that effectively criminalizes CMGs and outlaws gang membership is vital to this process. Canada and the United States both already have legislation (BILL C-51 [2015] and the RICO Act [1970], respectively) that can serve as models for developing Swedish laws against criminal gangs. If Sweden fails to act, the void can and will be further exploited by international criminal and terrorist organizations, which will not hesitate to use the differences between countries' legal systems to create safe havens and promote their activities. Sweden must have leadership at the national level and develop a national counter-gang strategy, preferably with broad international cooperation. If the sum of efforts is to be greater than its parts, the Swedish government must ensure unity of effort by clarifying the authority, mandates, and responsibilities of each agency or actor through carefully-crafted, comprehensive legislation and policy. Every agency and organization has something to offer and should be allowed to do so as part of a comprehensive government-wide response to a changing national and multinational security environment. ♦

A MILITARY UNIT
SHOULD BE ABLE TO
GO AFTER A CRIMINAL
OR TERRORIST TARGET
WITHOUT THE
USUAL CUMBERSOME
PLANNING AND
APPROVAL PROCESSES.

ABOUT THE AUTHOR

MAJ Anders Westberg is the Special Operations Command's SOF chair at the Swedish Defense University in Stockholm.

Copyright 2017, Anders Westberg. The US federal government is granted for itself and others acting on its behalf in perpetuity a paid-up, nonexclusive, irrevocable worldwide license in this work to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the US federal government. All other rights are reserved by the copyright owner(s). Foreign copyrights may apply.

NOTES

- 1 This example is based on the author's own experience.
- 2 Nikolina Bucht, "Police about to Rescue Life Were Met by Stone Throwing" [in Swedish], *Svenska Dagbladet*, 4 August 2015: <http://www.svd.se/polis-skulle-radda-liv-mottes-av-stenar>
- 3 Therese Mattsson, "System-Threatening Criminality: A Threat against the Society?" [in Swedish], *Kkrvaht* 4 (2009): 21–32; Susanne Ohlin, "Cold Facts Has Investigated Hells Angels Expansion across Sweden" [in Swedish], TV4, 5 December 2012: <http://www.tv4.se/nyhetsmorgon/artiklar/kalla-fakta-har-granskat-hells-angels-utbredning-%C3%B6ver-sverige-50bf13b004bf721ab400000a>
- 4 Mattsson, "System-Threatening Criminality."
- 5 Hunter S. Thompson, *Hell's Angels: A Strange and Terrible Saga* (New York: Random House, 1996), Kindle edition.
- 6 Alexandra Jones, "Transformers: Motorcycle Gangs and Extremism," *Foreign Intrigue*, 28 August 2014: <http://foreign-intrigue.com/2014/08/transformers-motorcycle-gangs-and-extremism/>
- 7 Thompson, *Hell's Angels*; Mattsson, "System-Threatening Criminality."
- 8 Walter Roberts, *Biker Gangs: Hells Angels, Pagans, Outlaws, Bandidos, Bosozoku and Other World Gangs* (London: RW Press, 2012), Kindle edition.
- 9 Mattsson, "System-Threatening Criminality."

- 10 Martin Mederyd Hårdh, "How the Police Will Combat Gang Crime" [in Swedish], *Svenska Dagbladet*, 29 July 2015: <http://www.svd.se/sa-ska-polisen-bekampa-gangbrottsligheten/om/sverige>
- 11 The Nordic Biker War, aka the Great Northern Biker War, took place across several Scandinavian countries in the mid-1990s. See, for example, Sarah Helm, "Biker Wars Dredge Up Something Rotten in the State of Denmark," *Independent*, 11 May 1996: <http://www.independent.co.uk/news/world/biker-wars-dredge-up-something-rotten-in-the-state-of-denmark-1346874.html>
- 12 Roberts, *Biker Gangs*.
- 13 Ohlin, "Cold Facts."
- 14 Only full members of the club can wear a jacket or vest with patches that display the signature Hells Angels name and winged skull logo. It can take years for a prospective member to receive his patches. Full members have the right to vote in chapter meetings.
- 15 Katarina Lagerwall, "IRS: The Average Citizen Is Nurturing the Criminal Economy" [in Swedish], *Dagens Nyheter*, 29 July 2015: <http://www.dn.se/nyheter/sverige/skatteverket-svenssons-goder-den-grova-ekonomiska-brottsligheten/>
- 16 Lars Lindström, "The Swedish Mafia Is Making Billions on the Black Market" [in Swedish], *Expressen*, 21 January 2010: <http://www.expressen.se/nyheter/dokument/svenska-maffian-tjanar-miljarder-pa-svartjobben>
- 17 Roberts, *Biker Gangs*.
- 18 Ohlin, "Cold Facts." Despite its relatively small numbers in Sweden, the Hells Angels' organizational structure and its leverage over potential rivals enable it to exert economic power through the black and gray markets.
- 19 Gordon McCormick, lecture on social grievances in a seminar on guerilla warfare, US Naval Postgraduate School, July 2014.
- 20 Leo Blanken and Jason Lepore, "One Arm Tied Behind Our Backs? Assessing the Power of the United States to Combat Global Threats," *CTX* 5, no. 3 (August 2015): <https://globalecco.org/one-arm-tied-behind-our-backs-assessing-the-power-of-the-united-states-to-combat-global-threats>
- 21 Brix Skis Blog, "A Low Intensity Urban War in Our Cities Is a Question of Policy—Homeland Security Policy" [in Swedish], 21 July 2015: <https://brixski.wordpress.com/2015/07/21/ett-lagintensivt-stadskrig-i-vara-stader-ar-en-fraga-om-politik-inrikes-sakerhetspolitik/>
- 22 Ohlin, "Cold Facts."
- 23 Lars Korsell and Daniel Vesterhav, "The Development and Attributes of Organized Crime in Sweden" [in Swedish], in *Brottsutvecklingen i Sverige år 2008–2011* [The development of crime in Sweden: 2008–2011] (Brottförebyggande rådet [Swedish National Council for Crime Prevention], 2011), 330–57: <https://www.bra.se/download/18.22a7170813a0d141d21800052658/1371914741967/15+Framv%C3%A4rten+av+och+k%C3%A4nnetecken+hos+den+organiserade+brottsligheten+i+Sverige.pdf>; Riksrevisionen [Swedish National Audit Office], *The Police's Preventive Measures—Have the Ambitions Been Met?* [in Swedish], RiR 2010:23 (Stockholm: Riksdagstryckeriet, 2010): http://www.riksrevisionen.se/PageFiles/8403/Anpassad%2010_23%20Polisens%20brotts%C3%B6rebyggande%20arbete.pdf
- 24 The Swedish Police, *Yearbook 2014* [in Swedish] (Stockholm: Polismyndighetens Tryckeri, February 2015), ver. 1.
- 25 Erik Olsson, "Sweden Has the Most Police Officers per Capita in the Nordic Countries—but the Sweden Democrats Want More" [in Swedish], 29 September 2015: <https://kit.se/2015/09/29/12837/sverige-har-flest-poliser-per-invanare-i-norden-men-sd-vill-ha-fler/>
- 26 Ibid.
- 27 The figures for patrol cars at night come from the author's personal experience. Värmland had 275,000 residents on 31 December 2015; see "Värmlands län: Fakta och perspective," Regionfakta.com: <http://www.regionfakta.com/Varmlands-lan/Befolkning-och-hushall/Befolkning/Folkmand-31-december-alder/>. In comparison, New Jersey had 389 police officers per 100,000 residents, according to Brian A. Reaves, in *Census of State and Local Law Enforcement Agencies*, 2008 (Washington, D.C.: Bureau of Justice Statistics, July 2011): <http://www.bjs.gov/content/pub/pdf/csllea08.pdf>
- 28 Mattson, "System-Threatening Criminality."
- 29 Thompson, *Hell's Angels*; Mattson, "System-Threatening Criminality."
- 30 Mattson, "System-Threatening Criminality."
- 31 Ohlin, "Cold Facts."
- 32 Patrik Micu, "Criminal Motorcycle Gangs Are Expanding in Europe" [in Swedish], *Expressen*, 8 August 2015: <http://www.expressen.se/kvallsposten/kriminella-mc-gangen-expanderar-i-europa/>
- 33 Military assistance, or MA, is a term used in NATO. In the US military, the equivalent would be security forces assistance or foreign internal defense, depending on the conflict and problem. In Sweden, there are no laws that prevent the military from supporting domestic law enforcement agencies. Moreover, there is a law that has been in effect since 2007 that expressly allows the police to request support from the military in response to terrorist acts. While this kind of cooperation is not allowed with regard to organized crime, the military could train and educate police officers and exchange ideas and experience with police agencies much more than they currently do.
- 34 David Tucker, "Intelligence: Police, Counterinsurgency and Organized Crime," in *Gangs & Guerillas: Ideas from Counterinsurgency and Counterterrorism*, ed. Michael Freeman and Hy Rothstein (New York: Guardian News and Media Ltd., 2010), 87–89.
- 35 Ibid.
- 36 For more on CoG analysis, see Joe Strange, *Centers of Gravity & Critical Vulnerabilities: Building on the Clausewitzian Foundation So That We Can All Speak the Same Language* (Quantico, Va.: Marine Corps University, 2005): http://jfs.ndu.edu/Portals/72/Documents/JC2IOS/Additional_Reading/3B_COG_and_Critical_Vulnerabilities.pdf
- 37 The author developed this model in 2006, while working in the Criminal Intelligence Department of Värmland County. The Center of Gravity (CoG) and CARVER models, although well-known to military analysts, had not been used by the police and were introduced to the county agency as well as the National Police Board at the time. The data shown in this article are only examples and not actual conclusions because investigations by the Swedish police are ongoing.
- 38 This example is based on the author's own experience.
- 39 US Department of the Army, *Special Operations*, ADRP 3-05 (Washington, D.C.: HQ, Dept. of the Army, 31 August 2012), 4–6: http://www.globalsecurity.org/military/library/policy/army/adrp/3-05/adrp3_05.pdf
- 40 Notisum, "Act (2006: 343) of the Armed Forces to Support the Police in Fighting Terrorism" [in Swedish], Rättsnätet [database], 2 March 2015: <https://www.notisum.se/rnp/sls/lag/20060343.htm>
- 41 Martin Mederyd Hårdh and Frida Svensson, "Sweden's Efforts against Radicalization and Terrorism Lag Far Behind Denmark's" [in Swedish], *Svenska Dagbladet*, 12 August 2015: <http://www.svd.se/sverige-pa-forskoleniva-i-arbetet-mot-radikalisering/om/svensk-terrorbekampning>

THE CTAP INTERVIEW

Vera Mironova, Belfer Center for Science and International Affairs

*Interviewed by Dr. Doug Borer,
US Naval Postgraduate School*

THIS INTERVIEW IS TAKEN FROM THE COLLECTION OF THE COMBATING Terrorism Archive Project (CTAP).¹ On 22 May 2016, Dr. Doug Borer, US Naval Postgraduate School, talked with Vera Mironova, a PhD candidate in political science at the University of Maryland and a fellow with the Belfer Center for Science and International Affairs at the Kennedy School of Government, Harvard University. They discussed Mironova's research into how terrorists organize themselves and manage their divisions of labor.² She has spent many months on the ground in a number of countries that are dealing with insurgencies and currently is observing the battle to retake the city of Mosul, Iraq, from ISIS.³ CTX editor Elizabeth Skinner sat in on their discussion.

DOUG BORER: Please begin by giving us an overview of your present work.

VERA MIRONOVA: I am earning my doctoral degree in political science, and I also study economics. So I am trying to merge those two disciplines together by looking at the internal organizations of terrorist groups—not what they are doing in the field, but how they operate inside. Imagine, for example, what a nightmare human resources [HR] is for these organizations. They have even a harder job than other kinds of organizations because they don't have a budget every year, but also have to look for their funding. And then, being a terrorist organization, they have everyone trying to kill them, which makes their job even harder. I am studying this because although it's hard, ISIS has been fairly successful at it. A lot of brigades are successful, but actually far more are not. So I am trying to see where other brigades made mistakes that caused them to be less successful.

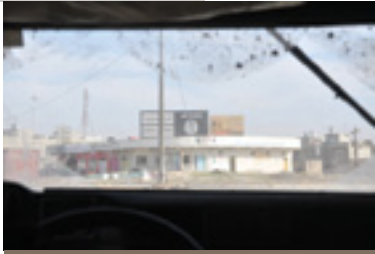
BORER: Are you doing a comparative study or looking at a specific country?

MIRONOVA: I am trying to do both. I am looking at different organizations, mostly at the labor market for rebel fighters in civil wars. My three main case studies are Syria, Ukraine, and Yemen, and I also have done a little work in Congo. I conducted the same survey with fighters in all of those front lines. By studying the Ukrainian paramilitary groups in Europe, the Houthis in Yemen, and Sunni groups in Syria, it will be easier to generalize from my work, because if something works in all of those really diverse places, I could assume it works everywhere.

BORER: Could you tell us a little bit about your method? Do you actually talk with the HR people of non-state armed groups?

MIRONOVA: Yes, I do talk to exactly those people. I interviewed them on the front lines. Otherwise, how would we know about their decision making? The second question we need to think about is whether or not we believe them. But first, let's talk to them. Those questions that I am asking about the labor market are not considered to be intelligence gathering, so it's not hard to ask them. I am not asking where the groups' finances are coming from or who they want to

I AM LOOKING
MOSTLY AT THE
LABOR MARKET
FOR REBEL
FIGHTERS IN
CIVIL WARS.



The Islamic State welcomes you...



...but not for long. Operation is going very well.



After an attack



Life in a Humvee

bomb tomorrow; I'm asking, why did you join? They talk about that with each other all the time. They talk on Facebook. They don't consider this anything hard to understand. So that's why it's possible to do this research by directly talking to them.

BORER: If you had to summarize maybe the top two or three reasons why people join these groups, what would they be?

MIRONOVA: The first reason some people join terrorist organizations is because they are hard-core supporters of the goal. Then some people join for a job—just for money. The third group is people who are forced to join.⁴ So, think about the first two reasons. It may be hard to understand these motives when talking about terrorist organizations, but I think any organization is like that. There are people who, from the day they were born, wanted to go into the military. Good. Other people think, Well, I didn't go to school, so maybe the military is a good idea because it pays. So, the same thing with armed groups. Like any organization, armed groups have a very hard time joining those two types of members together because each has different objectives.

BORER: Does that make a difference in the jobs that they do? If they join because of their dedication to the goal, do they become suicide bombers, or if they join for money, do they do a different task? Is there a connection between these things?

MIRONOVA: Yes, and I think this is the biggest problem HR is trying to solve. Because while it's okay to have the people who join for money, the organization cannot not give them something important to do. Imagine people who join the US military. You will take people who want to join for the GI bill.⁵ That's fine; you need people on the ground level. But can you imagine promoting a person who is not interested in the goals of the organization? If you did that, then the whole organization below him would know he doesn't care about the mission.

So, the biggest problem those guys in the terrorist HR have is to ensure that the people who are promoted are the most motivated people. Look at ISIS. In the beginning, when it had just started, it was taking only very dedicated fighters. It was a small brigade, and its members had to take a lot of risks. They were very motivated people. Then when ISIS was holding more territory and it had to govern it, it brought in a lot of people who were interested only in material benefits. It had to bring in people who pretended that they were pro-ISIS, but the only thing they had to do was stamp a paper, like a traffic violation. Did ISIS leaders care if these people believed in the ISIS idea? No, not as long as they could stamp papers. But at the top levels, they needed to ensure that they had people who were actually dedicated to the goals of the group. Those things actually change with time, however. When ISIS ran out of people who wanted to join even just for money, or when it ran out of money to convince those people to join, it went to conscription. Now, for example, I believe that in some ISIS-held territory, everyone who is older than 12 has to serve in ISIS.

BORER: Do you think that suggests that they are reaching the end of their recruitment base, or are there still a lot of people they can coerce or force to join?

MIRONOVA: I was in Iraq on the front line when the Mosul operation started [in the fall of 2016].⁶ I think ISIS is doing very, very badly. Internal motivation is nonexistent. We interviewed some defected security agents—they were not just fighters. It is almost impossible for people who want to defect from ISIS to do so.

There are too many of them, and ISIS is not happy with that, so they are being shot on sight. So it's really hard to defect, and morale is extremely low.

Is this a good thing or a bad thing? That's a different question. I think it's a bad thing because we have all these Syrians and Iraqis who joined ISIS for money, right? Now they don't get paid anything because ISIS is very low on money. It even cut food rations. So all those guys who want to defect will go back to their lives or become refugees. But, what's left is this core group of dedicated people, and particularly foreign fighters who burned their passports and who know they are on all possible terrorist lists. They are all over YouTube. Those guys are going to be stuck. You know what happens when you corner a dog? They are going to have two options. In either case they are going to die, but the question is, are they going to die alone, or are they going to take a lot of people with them? I am not saying it was an easy campaign to push them towards this edge. I am just worried that they are not going to want to die alone. There is no amnesty. They burned their passports, and they don't have an option. There is nowhere they can go.

BORER: Well, it seems that, if you were a local person, you might be able to survive if you were to defect. If you were an Iraqi fighter who had joined ISIS because of your sectarian preference, you would just join some part of the Sunni militia, whether it supported ISIS or something else. From your knowledge on the ground, is there a program by the Iraqi government to actually pull these fighters back into the state, or are they at high risk for being put in prison or somehow punished?

MIRONOVA: I talked to some government officials in Iraq about what happens when these fighters come back to the village, and by the laws of Iraq, they are going to have to go to prison. We know for sure that the leaders of ISIS in Syria right now are moving their families to Anbar Province to hide them among the local population. But they cannot hide themselves—they are too well-known. So, they are thinking about Libya, because they have to go somewhere. I understand that; they have to go somewhere. The foreigners who defected go to prison for life.

BORER: Are you familiar with the ISIS prophecy of the final battle in Dabiq?⁷

MIRONOVA: Yes, I am familiar in theory, but I don't think it has any reality, especially in terms of military strategy.

BORER: I'm curious: if there is this prophetic moment, would it be a good policy to try to make that happen? Can we take those committed hard-core foreigners who are going to die somewhere—they can't go home, and they are not from the local place—and create a "Dabiq"—that is, purposefully start a "final battle," whether in Dabiq or elsewhere?⁸

MIRONOVA: That would be nice, especially if you could go and do it in an unpopulated area. It would help a lot. Otherwise, it would just start another insurgency because civilians are not going to be happy with us bombing them all over the place. There is another option, although I know it's not a very good one, but think about the FARC in Colombia.⁹ They were huge, they were very dangerous, and people were terrified of them. Now they control a piece of forest the size of my backyard. Are they bad? Yes, they are rather bad. Are they annoying? Yes, they are rather annoying. Are they a danger to the world? No. But that's



Moving forward on foot (early, cold, and miserable morning)



The car was not lucky, but the people inside were fine.

“
THEY ARE GOING TO
DIE, BUT ARE THEY
GOING TO DIE ALONE,
OR ARE THEY GOING
TO TAKE A LOT OF
PEOPLE WITH THEM?
”



After securing a block, trying to make parking for a Humvee



ISIS marks on the wall indicate that the neighborhood was cleared of satellite dishes.



This street was just retaken from ISIS



Clearing the house where there is/was a sniper. They did not find the sniper but did find his equipment.



Friendly civilians who offered us cover in their house. The first thing they said was "Do not take a picture with this stupid beard." They then asked if we had cigarettes (smoking was not allowed by ISIS). They haven't left the house for the past two weeks during the fighting and told us that ISIS fighters who are now fighting against us on their street are Russian speakers — from Tajikistan and Kazakhstan (and one Syrian).

where all the leadership stayed—they are sitting in their forest. I understand this is not going to happen with ISIS because they have too many fighters and they were too loud about killing people on TV.

ELIZABETH SKINNER: So, you're suggesting that we should give ISIS a little town somewhere? Like the Indian Maoists, reduced to living in a forest in eastern India?

MIRONOVA: Exactly. I understand that, from a political perspective, no one could suggest it, but if you take the FARC as an example, the group was downsized to the most dedicated people, and they are sitting in a forest. It's not going to kill them off, but it's really going to decrease the danger.

BORER: But the question is whether their ideology is able to make the compromise. The FARC had a certain capacity to accept a deal, if they were able to convince themselves it was in their interest. If you gave them an autonomous zone and said this is FARC land, it seemed that the FARC leaders would be open to that. My question is, do you think that the intensity of the ISIS message and all of their propagandizing has boxed ISIS's leaders into a place where they really can't negotiate? Or do you think that they would?

MIRONOVA: They would negotiate. Propaganda is nice, and these norms are totally fine when it is not your life on the line. When you're reduced to survival, forget about ideology. When we talked to this defected security agent, he said that half of ISIS are going to convert to Christianity if it pays well enough.

SKINNER: There is the FARC example, but then there is also the Lord's Resistance Army example. They have been pretty weak for a long time, and all they have been able to do is wreak havoc on villages throughout the border regions of Rwanda and Uganda and Congo for 30 years. But they haven't been able to promote their ideology; they haven't been able to do anything but cause pain and suffering to local areas. My question is whether that might be another way for ISIS to continue, as this cancerous sore on the Syria-Iraq border, for decades.

MIRONOVA: Don't forget that a lot of foreign fighters are ex-drug addicts who found religion. A lot of them converted. They are in poor health. It's going to reduce their life span after the war, even if they survive the war.

BORER: Many of these insurgencies have been resolved, or at least partially resolved, by governments offering amnesty or reintegration programs, by basically saying, we will allow you to keep your military units, and then reintegrating them into official security forces in some form. Do you see such an idea as being possible, considering the widely different actors—the Iraqi government, the Syrian government, the Turkish government, the international community—that are involved? Do you see any possibility that there could be a coordinated resolution other than a military resolution?

MIRONOVA: I don't agree with the idea of reintegrating ISIS fighters. Why would you reintegrate them? Why would you make a special unit to integrate them and create a bigger population of jihadis? You're taking chances doing that because they have the possibility of bringing more people into their command structure. But you could leave them together to do their own thing, while keeping them under control. I am not saying leave ISIS alone to continue fighting, but I am saying that there are cases when that kind of strategy [of isolation] worked before

because there is always the question of what to do with the fighters once the fighting is over.

BORER: A number of people have argued that, if somehow the war against ISIS were successful and ISIS were destroyed, a new ISIS would be born, because the fundamental grievances and issues throughout the Middle East region are going to inspire somebody to create a new type of jihadi Islam. Do you agree with that?

MIRONOVA: Yes, absolutely. First of all, there is no money coming into this region. The number of kids being born during the war didn't even decrease that much, so even if the war ends, where are people going to get the money and whatever else they need to survive? The governments will not provide that. So, of course there will be more trouble coming. Even now, the Nusra Front is gaining power extremely quickly.¹⁰

BORER: If you were able to give the US president advice on what the United States should do about ISIS, would you have him continue the [Barack] Obama administration's small footprint approach? Would you say this is not a fight the United States should be involved with? Or would you do what many people in Congress, like Senator [John] McCain, have said, that we need more boots on the ground? In other words, escalate, stay the same, or deescalate?

MIRONOVA: Unfortunately, it's too late to not do anything. The United States lost the moment when it could do something slowly and carefully, and now Russia is in there. The United States cannot afford to simply stop being involved all of a sudden. But the question is, even with "boots on the ground," who exactly do we bring in there—people who are going to fight this war? No, that's not a great idea. Advisors to advise them on how to fight or maybe how to run the country? In fact, the majority of Syrian brigades have fallen apart, not because of military defeat but because they don't have any training on how to manage budgets, HR, logistics, and so on. Politicians like to say they are going to send in advisors. Advisors on what? We need to make sure we are actually doing something worthwhile.

BORER: So, how would you organize your brigade. How would you supply it? How would you discipline your troops? How would you train them on what was the acceptable use of violence?

MIRONOVA: Stopping corruption even at the brigade level would help. A lot of militias and fighters left the fight, including Islamist groups, complaining about the corruption. You don't want to work in an organization that has corruption. And after the war is over, corruption is going to be a problem again if the country is not run properly, and it will continue to be a source of grievance.

BORER: I like to conclude these interviews with what I call the "king for the day" or "queen for the day" question. If you were in charge of some aspect of these fights and you could get something done—say if you were nominated to be the US Secretary of Defense—what would you try to do?

MIRONOVA: I would increase the Fulbright program. It's really not a military thing, but I teach at the American University of Iraq as pro bono staff. I go in there from time to time, and these students are going to be leaders of that nation later on. If people don't know how to run the country, they are going to fail, and then the next time, the voters are going to vote for someone even more far-right because people think that's going to solve the problem. They are going to follow



Shell casings litter the street

THERE IS ALWAYS THE QUESTION OF WHAT TO DO WITH THE FIGHTERS ONCE THE FIGHTING IS OVER.



Looking for the missing head of a suicide bomber

a more hard-core person, like Putin in Russia. There need to be programs that educate the future leaders from those countries—not just for the military, but that educate them in, for example, public policy and economics. Right now, in Iraq, they need people to run the ministry of finance, the central bank, the ministries of transportation, education, and internal security, but they don't have people with the education and experience for those positions—the technical bureaucrats.

SKINNER: Before we finish, I have one more question. There have been conflicting stories about the level of involvement of former Ba'athists—former officials of the Iraqi government under Saddam Hussein—in ISIS. Some people claim that the Ba'athists are running ISIS, while other people are saying, no, that's overstated. What did you find out about the level of Ba'athist participation, if anything?

MIRONOVA: The Ba'athists know how to run an organization, so I think they help in that way. The question is, what is their actual involvement? I think they are very strong on a local, technical level. The leaders of ISIS are hard-core military guys. But people didn't like the way

they were being governed and were protesting, so the leaders changed their policies. That is the definition of democracy, in my opinion. ISIS has the same governance problem that the states do. The bureaucrats are in it for the paycheck, absolutely. Those guys are professionals. So, of course, ISIS is happy: "Oh, my God, good employees. Let's take them before someone else takes them because we are not going to be able to compete with anyone for their services."

ISIS HAS THE SAME
GOVERNANCE
PROBLEM THAT THE
STATES DO. THE
BUREAUCRATS ARE IN
IT FOR THE PAYCHECK.

BORER: This is part of the appeal, as far as I know, because the Shi'a-dominated [Iraqi] government excludes those people [former officials under Saddam Hussein] even though they are technically competent. They are politically unacceptable because they are associated with the old regime along sectarian lines. So, where are they going to go?

MIRONOVA: It does not matter whether bringing these bureaucrats into ISIS is politically or ideologically acceptable. If the group needs those people, it will modify its propaganda to include them. Those are just words—who cares? ❖

NOTES

- 1 The Combating Terrorism Archive Project (CTAP) aims to collect and archive knowledge on strategy, operations, and tactics used by military and other security personnel from around the world in the twenty-first-century fight against global terrorism. Collectively, the individual interviews that CTAP conducts will create an oral history archive of knowledge and experience in counterterrorism for the benefit of the CT community now and in the future.
- 2 This interview was edited for length and clarity. Every effort was made to ensure that the meaning and intention of the participants were not altered in any way. The ideas and opinions of all participants are theirs alone and do not represent the official positions of the US Naval Postgraduate School, the US Department of Defense, the US government, or any other official entity.
- 3 For a look at Mironova's recent activities in Mosul, see Eric Schmitt, "Papers Offer a Peek at ISIS' Drones, Lethal and Largely Off-the-Shelf," *New York Times*, 31 January 2017: <https://www.nytimes.com/2017/01/31/world/middleeast/isis-drone-documents.html>
- 4 *Editor's note:* For more about how ISIS organizes its labor needs, see Vera Mironova, "ISIS Prisons: Where Labor Demand Meets Labor Supply," in this issue.
- 5 The "GI Bill of Rights," officially the Servicemen's Readjustment Act of 1944, is legislation originally passed by the US Congress to provide education, housing, health, and other benefits to World War II veterans. It has since been expanded to cover anyone who has served in the US armed forces.
- 6 What is being called the Battle for Mosul began when Iraqi, US, and coalition forces launched a major operation to force ISIS out of the northern Iraqi city, the last ISIS stronghold in Iraq. The fight is ongoing. For details, see "Battle for Mosul: The Story So Far," BBC World News, updated 21 March 2016: <http://www.bbc.com/news/world-middle-east-37702442>
- 7 Dabiq is a small Syrian town that ISIS doctrine declares will be the site of the final battle between Islam and the West, in which the forces of Islam will finally prevail.
- 8 *Editor's note:* To learn more about religious fundamentalism and the role of biblical prophecy in armed religious movements, see Jonathan Nagle, "Fundamentalism: The Branch Davidians and the Islamic State," in this issue.
- 9 The Revolutionary Armed Forces of Colombia (FARC) waged a vicious insurgent war against the Colombian government for 50 years. The two sides recently negotiated a peace deal.
- 10 Jabhat al-Nusra (now Jabhat Fateh al-Sham) is a splinter of the Islamic State of Iraq, which was the immediate precursor to ISIS. After the two groups had a falling-out over strategy and goals, the members of al-Nusra split off to concentrate on the fight against the Assad regime.

THE CTAP INTERVIEW

Bruce Hoffman, Georgetown University

*Interviewed by Dr. Michael Freeman,
US Naval Postgraduate School*

THIS INTERVIEW IS TAKEN FROM THE COLLECTION OF THE COMBATING Terrorism Archive Project (CTAP).¹ On 3 February 2017, noted terrorism expert Dr. Bruce Hoffman, director of the Center for Security Studies at Georgetown University, visited the US Naval Postgraduate School (NPS) in Monterey, California. Dr. Michael Freeman of the Defense Analysis Department at NPS spoke with Dr. Hoffman about the lessons on counterterrorism in Dr. Hoffman's history of the founding of Israel, *Anonymous Soldiers: The Struggle for Israel, 1917–1947* (Knopf, 2015), and about the West's strategies to defeat ISIS and Salafist terrorism.² Global ECCO's Amina Kator-Mubarez and CTX editor Elizabeth Skinner sat in on their discussion.

MICHAEL FREEMAN: Why did you decide to devote 600 pages to the history of the founding of Israel?

BRUCE HOFFMAN: The book is a detailed study of how terrorism affects government policy and decision making. It looks at how both Arab and Jewish terrorism influenced British policies and decisions during the time that Britain ruled Palestine, from 1917 until they decided to leave in 1948. It came from my frustration with a lot of the political science studies of whether or not terrorism works. Governments and political leaders always say it doesn't work—the victims of terrorism say it doesn't work. But there is this fundamental paradox: if it doesn't work, then why has terrorism existed for two millennia, and even more, why has it become so entrenched and dominant as a strategic threat, in addition to the tactical threat that it always has been? In other words, if terrorism is such a failed strategy, then why does it persist? I thought that the only way to really know this was to take a very detailed look at the archives on how governments frame policies and also, on a day to day basis, how the police, the military, and the intelligence services react and respond to terrorism.

Palestine-Israel was such a good case study because, first, the events described in the book happened over 70 years ago, which means that there is a particularly rich body of archival information available in multiple countries, in Britain certainly, but also in Israel and the United States. It's only by going to the archives that we really begin to understand how terrorism factors into governments' decisions and policy making and how they react to it. It's very rare that you can get as complete a picture as is captured in *Anonymous Soldiers*.

FREEMAN: So you have seen evidence that officials changed policies based on terror attacks, showing that, to some degree, these attacks worked to change policy?

HOFFMAN: Yes. Part of the argument of the book [*Anonymous Soldiers*] also is that history is rarely mono-causal. Where I think terrorism does play a big part is when it speeds up events, but it may not have the effect that terrorists claim because, historically, there are very few instances where terrorism actually

IF IT DOESN'T
WORK, THEN
WHY HAS
TERRORISM
EXISTED FOR
TWO MILLENNIA?

succeeded at achieving its users' goal. But the catalytic effect that terrorism has can narrow a government's opportunities to make decisions, or really flesh out policy, by goading governments to respond emotionally rather than soberly. That's what terrorism is all about, and I think it's been used more successfully than we give terrorists credit for.

Now that's not to praise or encourage terrorism, but it's rather to say that defeating terrorism is much more critical than we imagine, and much more time-intensive. The dangers of ignoring terrorism's second- and third-order effects, or indeed, of precipitously declaring victory, are enormous because all terrorists seek to enmesh their adversaries in protracted wars of attrition to help to undermine confidence in government leadership. We saw that happen in Palestine and also back in Britain during the formation of Israel. Terrorism imposes profound economic pressures on government, something that was very clearly true when 100,000 British troops were tied up in Palestine during and after World War II. Some of them had been drafted in January 1944 and were still in the military, but now fighting in Palestine three years later. Terrorism also attempts to compel liberal democratic governments to embrace illiberal solutions in pursuit of their security, which is also exactly what happened in the Palestine case. Terrorism helps to deepen fissures in societies and polarize political opinion. All those outcomes were present in Britain after World War II in the context of the Palestine issue, and in recent months, we have seen those same factors at play in the United States and Western Europe.

“TERRORISM SIMPLY HAS TO WORK BETTER THAN THE ALTERNATIVES, IN THE CALCULATIONS OF ITS USERS.”

FREEMAN: One of the things I have always thought was odd is when people say terrorism doesn't work, but we have to ask, then why do terrorists do it? Terrorism could actually be the most rational strategy for an insurgent group, even if it never works, as long as it's the *most likely* course of action to work. The probability of success can be a fraction of one percent, but if every other option is zero percent, it still might actually be a completely rational decision, even if it has always failed in the course of history. So when you have some of these cases of success, like in the Algerian war for independence, the use of terrorism actually becomes more rational because the insurgents can say, well, it might only work in two or five or 10 percent of the cases, but that's enough because we can model our plans on that. This is why I think the contention that terrorism doesn't work seems to be a false debate, because it simply has to work better than the alternatives, in the calculations of its users.

HOFFMAN: You are absolutely right. At a very minimum, simply attracting attention to themselves and their cause means that the use of violence succeeds. But you have also fastened on another important point. People will say there are only a handful of well-known examples when terrorism was effective, but that's exactly the point. That handful of well-known examples has served to subsequently motivate and inspire similarly aggrieved peoples to believe that, if they turn to violence, they too can thrust their cause onto the world's agenda. That's what is so important about the Palestine example. I argue in *Anonymous Soldiers* and—in a more condensed fashion—in *Inside Terrorism*³ that modern terrorism—this belief in violence as a means of communication to mobilize support, to pressure government, and to attract attention to oneself and one's cause—really crystallized with the campaign of the Irgun Zvai Le'umi, the National Military Organization, led by a future prime minister of Israel, Menachem Begin. Begin himself, in an earlier incarnation, had been in charge of information

operations—what was then called propaganda, a word that's just as negative these days as terrorism is. More clearly than anyone else at the time, I believe, Begin understood the fusion between violence and communication, and how daring and dramatic acts of violence could focus the world's attention on the terrorists and their cause and transform a local problem into an international cause.

FREEMAN: Terrorism was thought of by the anarchists as “propaganda by deed.”

HOFFMAN: Yes, exactly. Begin and the Irgun were taking advantage of what was modern media then—radio, in particular, but also simply the ability to transmit news quickly to a wide audience—not visual news, but first-hand immediate accounts of events. So Begin definitely took advantage of that, and also of the creation of the United Nations. He was the first real terrorist leader who directly appealed to the United Nations to intervene. We have seen that since then, of course, until arguably, al Qaeda, because al Qaeda sees the United Nations as a manifestation of Western world dominance as much as anything else. But whether it was the PLO, the IRA, or any other insurgent or terrorist group, these underground movements have often sought the recognition that they could obtain through an important international body like the UN.

FREEMAN: One of the things that I have always been interested in is the historical roots of terrorism versus what's new about modern terrorism. It seems that how terrorists see the strategic utility of terrorism and how they think about the impact on democracy or an audience of policy makers are fairly consistent through time, right? If Begin were put in charge of some terrorist group today, he wouldn't be out of place thinking about the use of violence in a strategic sense, maybe even in a tactical sense. Terrorists still essentially do just two things: shootings and bombings. So what are the similarities and consistencies across space and time among terrorist groups and terrorist campaigns—and counterterrorism campaigns? Also, what is new, what is different or modern about al Qaeda or ISIS? I am reluctant to buy into this “new terrorism” notion—since 9/11 everything is “new.” But al Qaeda didn't use anything new. Mass shootings in Paris and Belgium—the FLN [National Liberation Front] was doing that in the Battle of Algiers. I think people get caught up in the idea of newness, but I wonder what exactly you think has been

consistent and what might be new about some of the threats we see today?

HOFFMAN: Well, I think the one thing that will always be consistent is that, as politically radical or religiously fanatical as terrorists might be, historically, they are operationally conservative—that is, they go with what works and what they believe will facilitate the success of an operation. This is why guns and bombs have been the stock-in-trade of terrorism for over a century. Terrorists today focus much more on mass casualty operations because they see that as the essential ingredient for a successful terrorist operation, not least to get publicity and attention. For that reason, I think Brian Jenkins's famous aphorism from 1975, that terrorists want a lot of people watching and listening but not a lot of people dead, has unfortunately become anachronistic. Terrorists still want people watching and listening, but they also want a lot of people dead because they think that's the vehicle that will ensure them attention and publicity. Also, as I have often

written, I think the religious element became salient after 9/11, but this was certainly already changing at the end of the twentieth century. Religion has made mass casualty terrorism much more legitimate and justifiable for some groups because their conception of a constituency is different. Their motivation became divinely ordained—they wanted not so much a role at the United Nations as to completely eliminate their enemy. This shift is behind the ethnic cleansing and sectarianism that we see driving so many conflicts in the Middle East.

“AS POLITICALLY
RADICAL OR
RELIGIOUSLY
FANATICAL AS
TERRORISTS MIGHT
BE, THEY ARE
OPERATIONALLY
CONSERVATIVE.”

FREEMAN: Does this make these terrorists harder to negotiate with?

HOFFMAN: I think they were easier to negotiate with in the past because they saw themselves as changing a system of government and replacing it with an alternative system, or with achieving some goal of political independence or self-determination. Whereas now, I think that when religion gets mixed into the motivation, eliminating a rival people whom they disdain is often an end in itself. It's all about getting power, of course, as terrorism has always been, but now they also want to overturn the current world system. They see the United Nations not as providing them with a voice in the way that terrorists of the twentieth century did, but rather as part of the repressive status quo machinery.

Operationally, I don't think a lot has changed. Bombs are smaller and much more powerful than they used to be, and so are handguns and automatic weapons, but terrorists still use these two basic weapons systems. What's changed is that the most effective terrorist organization is the one that lasts the longest or is a true learning organization. These organizations consciously study other groups, so you see successive terrorist generations that generally are more difficult to eliminate and more operationally competent than their predecessors because they are learning how to survive from the remnants of previous groups. The power we once had to intercept and interdict and therefore prevent terrorist attacks has been rendered considerably less useful by off-the-shelf commercially available or even free communications apps like WhatsApp or Telegram. We know that these things played an enormous role, for instance, in planning the 2015 Paris attacks.

FREEMAN: You're talking about how terrorists, the smart ones, learn from history and become more resilient, smarter, better. That's one side of the fight. Are states doing the same thing? If we do a net assessment, history might overall be neutral or favor one side or the other, depending on whether one side is better or worse at learning from it. You say terrorists, or at least the good ones, are like the bugs that don't get killed by antibiotics but instead become superbugs—bigger, stronger, better—right? We're academics; we're trying to get smarter about this—but are policy makers and states wiser now than they were 60 years ago? Are we learning from history equally, or less, or more than terrorist groups?

HOFFMAN: The simple answer is no. We are dismal at it, in fact. We constantly reinvent the wheel because we forget General [James] Mattis's admonition that "the enemy gets a vote." I don't think we fully realize that our enemies, whether ISIS or al Qaeda, have locked us into wars of attrition. We don't realize that we are up against enemies who, because of their divine inspiration, see this as a successive, generational struggle. The other problem is that, although on an individual basis within agencies there is continuity, generally speaking, we are always reinventing the wheel. We certainly saw this in the past decade with the revival of counterinsurgency: much like after the Vietnam War, the conventional military sought to completely eschew any involvement in this messy type of warfare. With the drawdowns in Iraq and then Afghanistan, we saw a very similar mindset emerge, a belief

that the *next* war is going to be a conventional one against a nation state. It might well be, but it's not an either-or prospect. We see that there are more and more terrorist groups forming. There are also more branches and affiliates that are attaching themselves to existing terrorist groups, which multiplies the problem.

Terrorist groups have to learn, or they don't survive. National survival is rarely at stake because of terrorism, which is why we have this very odd attitude. We tend to overreact in the immediate aftermath of a terrorist attack, but then, as time proceeds, we become much more complacent until we are once again spun up by a new terrorist incident. Unfortunately, that's part of the terrorist strategy: to constantly take us on that rollercoaster in order to diminish our will. That's what we always have to guard against, but as you know, in 2005, the phrase "the long war" was banished from the Pentagon. How could you describe this as anything else? In 2005, we really faced only one adversary, and that was al Qaeda. Now we face al Qaeda and ISIS and also a multiplicity of terrorist branches and affiliates of both.

“THE PHRASE “THE LONG WAR” WAS BANISHED FROM THE PENTAGON. HOW COULD YOU DESCRIBE THIS AS ANYTHING ELSE?”

ELIZABETH SKINNER: Along those lines, there are all the terrorists groups in India, such as Lashkar-e-Taiba [LeT], Indian Mujahedeen, and others that seem to be bandwagoning with ISIS. Are these groups really going to follow along and adopt ISIS's agenda, or do you think they are going to end up fighting for supremacy at some point? Or do you think they have completely different agendas?

HOFFMAN: Well, all these groups are opportunists, and they will hitch their fortunes to whatever rising star they see because they believe that simply associating themselves with a violent and powerful terrorist organization enhances their own credibility. And they certainly hope that it enhances the threat they pose in the eyes of their enemies. I think what's interesting about terrorists in the twenty-first century as opposed to the twentieth century is that in the past many of them had mostly local or perhaps regional agendas, but the newer groups have become progressively internationalized—at least in their rhetoric.

I remember years ago you could actually go to the web pages of terrorist groups like LeT, before they were all taken down, and even though its agenda is primarily about the liberation of Kashmir, its home page showed three flags dripping in blood: India's, as one might expect,

because India is in possession of Kashmir, but also the United States' and Israel's. So even back then, they had already internationalized their agenda. Terrorist groups, because of their opportunism, seek whatever sources of support and sustenance they can get. They understand that if they can broaden their appeal and gain new constituencies through alliances or popular support beyond their birthplace or their own narrow locus of operation, that will be a force multiplier and enhance both their power, and they hope, their longevity. So they form alliances of convenience that are constantly shifting depending on the popularity of the group they might associate with. But it doesn't mean that any of these affiliations is necessarily carved in stone. Of course, the fact that many of these groups receive state support, whether actively or clandestinely, or at least are tolerated by states makes the whole problem of terrorism much more difficult to counter today than it's been in the past.

FREEMAN: So, you see that, at least for as long as ISIS is ascendant, groups like LeT will continue to associate themselves with it, at a minimum?

HOFFMAN: I think their DNA is the same as al Qaeda's and that's really their most stable long-term relationship. I think there are elements within these groups who are impatient or who see the upstart terrorist group as the next best thing and are opportunistically taking advantage of it. But I don't see these associations with ISIS as being much of a long-term trend because most of these groups remain more in the al Qaeda mainstream. Where they fit together the most is probably in ideology. Their general ideologies aren't that different. The differences, most often, are in personalities—tone or style or certainly, leadership.

FREEMAN: Going back to what you were saying about states learning and the fact that states don't face the existential threats that terrorists do: if terrorist groups lose, they are dead and destroyed, while states can muddle through the aftermath and aren't forced to learn and remember the lessons very well. In your book [*Anonymous Soldiers*], I know you don't go past 1947, but the Israelis, probably more than anybody, have faced an existential threat for the last 60 years. Do you think that they have learned lessons about counterterrorism and terrorism better than other countries because they have had to deal with it so much—at least more so than the United States or others? Also, Britain, right? Britain hasn't faced an existential threat to the same degree as Israel, but more so than most from their experiences in Palestine, Oman, Yemen, Malaysia, and Kenya, and then Northern Ireland. But they are still trying to figure this out, even with all the advantages of history and with many of the same people. The United States has a fleeting historical relationship with terrorism on its soil, in the 1970s and 1980s, a little bit in the late 1990s, and then with 9/11. But there are other countries that have a more consistent history with terrorism. Do you think that they are any better at learning better lessons than the rest of us?

HOFFMAN: No, I don't think so. Israel in one sense sees terrorism as a perpetual state of regional politics, of international relations—the nature of conflict. I think they are also very attuned to its dynamic and evolutionary nature. A decade ago, suicide terrorism was the main threat, but then both the 2006 war with Hezbollah and especially the 2014 summer war with Hamas were not fought with suicide terrorists; they were fought with stand-off weapons, by rockets fired by both adversaries. So I think Israel in general has been better at learning.

“ IF TERRORIST GROUPS
LOSE, THEY ARE
DESTROYED, WHILE
STATES CAN MUDDLE
THROUGH AND AREN'T
FORCED TO LEARN. ”

I don't think it necessarily comes from Israel's own historical background as much as from the nature of where Israel exists: its leaders have had to constantly monitor any changes and know if they might be susceptible or caught off balance. For example, in the First Intifada, when they dealt with suicide terror in the 1990s, they brought it under control, but then they saw a very different type of suicide terrorism that was demographically more diverse and more sustained, and that caught them completely off balance. In a short period of time, the Israelis were able to change strategies and come up to speed because the survival of the population was enormously important.

Britain is a very good case study in not learning from the past and making the same mistakes in serial conflicts. If you remember the Robb-Silberman commission that looked into the intelligence behind the Iraq WMD claims, one of its conclusions discussed the danger of inherited assumptions, and I think that was the case with both Britain and France.⁴ What they did learn were more often the wrong lessons or the most convenient lessons—in other words, they assumed that what worked in one place would automatically work in another, instead of understanding the very different cultures, very different socioeconomic conditions, very different political dynamics in each place.

You can't have a one-size-fits-all counterterrorism strategy. You have to customize it and tailor it. I think what's interesting about Britain is that it's really not until the 1980s, a decade and a half after the more recent iteration of the Troubles in Northern Ireland had manifested, that British leaders finally began to learn lessons and turn their policies around. The effect of that strategic shift was that, within about a decade of adopting it, they had the Good Friday Agreement, and the conflict was over. It took them from 1968 until the early 1980s to realize what they had to do, and then another decade to get it right, but they had the patience to see it through.

FREEMAN: Let's talk about ISIS, the Islamic State. What do you think of them as a threat? What do you think of them as a terrorist group? Where are they headed? If you were king for the day, and you got to coordinate all international CT policy against ISIS, what would your recommendations be? It's a small question. *[Laughter]*

HOFFMAN: Well, there are two things. In a short period of time, ISIS has gone very far, which means its influence and impact, and even its existence, need to be eliminated. But I think ISIS is here to stay for the foreseeable future, even as it has lost territory and lost fighters, even as we've killed its leaders. Its more "conventional" capabilities will be eroded, even its capacity for insurgency will be diminished, but its international terrorist capability is going to continue.

FREEMAN: Will it increase?

HOFFMAN: I certainly think that while we were fixated on the idea that ISIS was just interested in Syria, the Caliphate, and Iraq, and that the violence would remain confined to that region, ISIS was laying down roots in Europe and elsewhere—an external operations capability that I think functions somewhat independently from its battlefield operations. This means that whatever defeat is inflicted on ISIS on the ground, whether in Libya or Iraq or eventually Syria, it will still have an external terrorist operations capability. In addition to all the motivations and goals that exist today, layered on top of that will be revenge

“
YOU CAN'T HAVE A
ONE-SIZE-FITS-ALL
COUNTERTERRORISM
STRATEGY. YOU HAVE
TO CUSTOMIZE IT.”

and retaliation for the destruction of the Caliphate. So I don't think we should be blinded by the assumption that anything that's going on now is more than the beginning of the end—it's not the end. I think the decapitation strategy that we have pursued is a very important and useful tactic in countering terrorism, but in and of itself, decapitation, historically, has never eliminated a terrorist group, and I think ISIS will be able to transition from the ISIS we see now to a terrorist entity that will continue to be threatening.

FREEMAN: As I understand it, there have been three leaders of ISIS, and the effectiveness of a leadership decapitation strategy depends on how good the leader is. The first leader, [Abu al-] Zarqawi was pretty effective in mobilizing this group of fighters. The next guy, Abu Omar al-Baghdadi, was not too effective, and we killed him. His replacement [Abu Bakr al-Baghdadi] is actually the one who has expanded the war. So sometimes the effectiveness of leadership targeting depends on whether the guy is actually doing a good job, because it might be better to leave him in place.

HOFFMAN: The key to understanding the strategic limitations of targeted assassination is understanding that it may have second- or third-order effects that we need to anticipate. There was an article in the *Washington Post* that talked about how we had gotten the six top leaders of ISIS, Abu Mohammad al Adnani being the main one. Fair enough, but we also have to understand that we have eliminated the hardcore people who were real Baghdadi loyalists and completely bought into ISIS's enmity with al Qaeda and its rivalry with [Ayman] al Zawahiri. Similarly, it's great to kill off the leaders, but we have to be prepared for what the long-term repercussions might be. One of them may be that we eliminated all of the ISIS leadership's most implacable opponents to a reamalgamation with al Qaeda. In terms of cohesion, leadership depth, and control over its branches, al Qaeda is much stronger than ISIS. The one thing it doesn't have is a very strong external operations capability in Europe, and that's partially because al Zawahiri, at least for the past three years, forbade those types of terrorist operations. I think this is because he has been intent on very quietly rebuilding al Qaeda while ISIS hogs the limelight, monopolizes our attention, and further exhausts and enervates us as part of this overall war-of-attrition strategy. But then that also means that if he doesn't exercise the capability to strike, he doesn't really have it.

So this is where I think ISIS is ahead of al Qaeda and has something al Qaeda covets—this external operations network in Europe—which I would argue also makes some reamalgamation quite possible. Only a few years ago, the conventional wisdom was that this split was completely irreparable, that because of infighting both groups would consume and ultimately neutralize one another. To me, that was a fundamental misreading of terrorist history because factions and splinters tend to be more violent than the parent organization. They have to be able to get recruits and support to demonstrate their relevance to the cause. That's exactly what we saw with ISIS and with al-Baghdadi declaring himself Caliph and reestablishing the Caliphate.

FREEMAN: You've talked about some missed opportunities with al Qaeda. In hindsight, would you have done something differently in the last 15 years? Or would you do something differently now?

“**WHATEVER DEFEAT IS
INFLECTED ON ISIS, IT
WILL STILL HAVE AN
EXTERNAL TERRORIST
OPERATIONS
CAPABILITY.**”

HOFFMAN: The [George W. Bush administration's] aversion to putting sufficient US ground forces into Afghanistan when [Osama] bin Laden was fleeing, particularly when he was in Tora Bora—history would have been different had we killed bin Laden then. I think it was enormously important to kill bin Laden whenever we could get him. When we succeeded, it did knock the group off balance at a critical time, especially during the Arab Spring [2011–2012]. But after a decade in retreat, the group itself had developed a robust enough leadership cadre that it could carry on the struggle. Bin Laden had worked himself up to being an inspirational figure, which he might not have been if we had found and killed him sooner. After all, for a decade, he survived the greatest onslaught directed against a terrorist organization in history and probably the most extensive manhunt in history. That burnished his credentials and gave al Qaeda this appealing image that was much more difficult to dim.

I think that was the first mistake. Again, this is all in retrospect. But even looking back at it, I saw the diversion of assets from Afghanistan to Iraq in 2003 first hand—I was in both places. The invasion of Iraq played into al Qaeda's narrative that the United States and the West were waging a global war against Islam. Again, none of this is to second-guess those in authority at the time or say they should have made a different decision. What I mean to say is that we didn't fully take onboard the second- and

third-order effects or the long-term repercussions of groups that are determined to survive. We didn't assess ahead of time how they would likely intend to survive, so that when they did survive, we were often taken by surprise. How many times in the past five years have we heard that al Qaeda was on the verge of strategic collapse? Those exact words were used. Yet when General James Clapper, the director of national intelligence, testified before the Senate in February [2016], he talked about how al Qaeda was becoming increasingly resilient and was poised to make further gains in that year.⁵ So much for the strategic collapse.

We can debate until the end of time whether a status of forces agreement could have been agreed with in Iraq. Leaving even 10,000 troops in Iraq would have given us the influence over the government to prevent the resurgence of terrorism and the rise of ISIS. But I think what's incontestable is that the mistakes we made in 2010 and 2011 resulted in a far more perilous situation in Iraq today than would have otherwise existed. Again, these are indirect effects of allowing ISIS to revive—seeing Iraq now basically broken apart by ISIS's invasion. There were opportunities we missed that could have resulted in a different history today.

Right now, I think the most serious mistake we are making is not dealing decisively with the terrorist threat, in the sense that we have allowed ourselves to fall into the terrorists' trap of this war of attrition. I am not saying that it is a successful strategy or that it will prove so, but we see the terrorists' goal of undermining popular confidence in elected leadership materializing today—and this is a phenomenon not just in the United States, but in Europe—creating deep polarizations and political divisions within society, the economic pressures of maintaining a constant op tempo regarding domestic security, sustaining overseas military deployments, and maintenance of extensive intelligence capabilities. This pressing of liberal societies to increasingly embrace or at least to discuss illiberal solutions to security is the stock-in-trade that terrorists depend on. So, one way or the other, I think we are back in a position where we have to read ISIS and other extremist groups as a threat we have to deal with decisively and not in any protracted fashion.

FREEMAN: What would a more decisive strategy entail?

HOFFMAN: I think it starts with the realization that the three pillars of our counterterrorism strategy for the past eight years haven't worked. Leadership decapitation has kept our enemies off balance but has not delivered any kind of a crushing blow to them. By my count, al Qaeda now has a presence in at least three times as many places as it had in 2008. According to the National Counterterrorism Center, when we began the campaign against ISIS in 2014, it was present in five countries. In 2015, it was 15, and now it's 18 countries. Clearly, even while we had success decapitating both groups, they were seizing more territory and also polishing their brand. The second pillar was the training of host-nation militaries—which has failed abysmally, whether in Mali and Yemen or Iraq and Afghanistan. I am not saying these things aren't critical to a counterterrorism policy; I'm just saying they are not working in their current form and they have to be part of a broader strategy. No place where we have trained indigenous forces have we had a success against terrorism. Even in the current push against Mosul, if the Iraqi security forces could do it themselves, it would be a lot more positive, but they are dependent on both the Kurdish Peshmerga and even more problematically, the Shi'a popular mobilization forces. Just a few years ago, Yemen had been touted as a success story. So the way we are doing CT now isn't working.

ISIS HAS SOMETHING
AL QAEDA COVETS—
THIS EXTERNAL
OPERATIONS
NETWORK IN EUROPE.

The third pillar, the counter-messaging, counter-narrative strategy also failed, in my view. ISIS has over 40,000 foreign fighters from more than 100 countries, so clearly the message isn't getting out there.

So the first imperative for the new [Donald Trump] administration is to step back and ask why all these things that are central parts of a counterterrorism strategy are not working? What more needs to be done or what additional resources need to be brought to bear? A decade and a half ago, we believed there was a purely military solution to terrorism. We found out there wasn't, but that's because policy makers overemphasized reliance on the military. In the past eight years, we have swung in the opposite direction: having decided that there isn't a military solution, we've tried more specific types of targeting, training host nations, counter messaging, but that hasn't worked either. The answer is to find what is in the middle, and I think it's using military force to break the backs of the terrorist organizations. Once that's done, I believe the non-kinetic dimensions are invaluable in preventing the recrudescence or the reappearance of the terrorists. But without

kinetically diminishing the power of these groups, we can't diminish their allure. That's where I don't think we have been successful.

FREEMAN: On the counter messaging, I saw a story in the *New York Times* about a group called the Legion for ISIS, who were ISIS propagandists.⁶ The United States and its allies have gone after these guys pretty aggressively, and the ones who were killed have not yet been replaced. It was interesting to me because we don't usually think of counter messaging as kinetic. But this is a similar argument to leadership targeting: if there aren't any effective replacements for them, it might be effective to take out 10 or 20 of these guys who are doing the ideological outreach and propaganda.

HOFFMAN: Again, my point is that the answer is not one or the other; it's fusing both together, and the main lesson may be that the propaganda chief is the most important person to take out instead of the actual operational commanders. There is a problem in that, too, because many of the propagandists did become operational commanders, but that sort of targeting probably does have a greater impact: it enhances the non-kinetic counter messaging by removing these key voices. But, of course, we killed Anwar al-Awlaki, and his old sermons are still tremendously effective at motivating individuals.

AMINA KATOR-MUBAREZ: As far as Syria is concerned, how difficult is it for the United States to distinguish rebel groups versus ISIS? At this point, does it make more sense for the United States to allow Assad to try to defeat ISIS, because it's so difficult to distinguish groups?

HOFFMAN: Well, the trouble is that I think there were more legitimate rebel groups the United States could support two or three years ago than there are now. A lot of the more moderate groups have been eliminated by Assad, and by rival groups, too. What we don't realize is that for many of these groups it's a zero sum game. In all these conflicts, there has been a whittling away of all but the most extreme forces, especially as the conflicts have become more protracted and more violent, and extremists thereby gain greater cachet. You now have this proliferation of Salafi jihadi groups and the exclusion of the more secular, more moderate groups, which makes finding allies on the ground more difficult. This goes back to my point, that the longer you allow these things to play out, the more complicated they become and the more difficult they are to handle. So I think addressing the problem earlier on would have been more effective.

What probably worries me most is that the longer the war is prolonged, the more appealing the Russians' stasis solution [keeping Assad in power] will be to other powers as well because they see no solution, whereas it was a very different situation some years ago.

FREEMAN: I see three alternative outcomes: ISIS winning all of Syria, Assad reestablishing control over all of Syria, or some negotiated amalgamation of rebel groups—but that's hard to imagine. If I were betting on any of those three, the Assad regime continuing in power and eventually establishing control over the vast majority of the country seems like the most probable outcome. It seems we're caught between a rock and a hard place. We want to defeat ISIS, but defeating ISIS is defeating one of the rebel groups that is fighting against Assad, and doing so would indirectly empower Assad. He's not fighting them directly, as I

“
WITHOUT KINETICALLY
DIMINISHING THE
POWER OF THESE
GROUPS, WE CAN'T
DIMINISH THEIR ALLURE.
”

IT MAY BE THAT
THE PROPAGANDA
CHIEF IS THE MOST
IMPORTANT PERSON
TO TAKE OUT INSTEAD
OF THE OPERATIONAL
COMMANDERS.

understand, but if he doesn't have to worry about fighting ISIS, he can go after the other rebel groups, and that helps him. Somebody is going to be in power, and we don't like all the other Salafist rebel groups. There aren't too many of the moderate rebel groups left. We have ISIS versus Assad.

HOFFMAN: You've left out the most pernicious effect, which is that al Qaeda seems to be increasingly legitimate and acceptable. You don't see the name al Qaeda used at all in Syria. It's either [Jabhat al-Nusra or now Jabhat Fateh al-Sham]. They avoid declaring themselves to be al Qaeda to achieve exactly what bin Laden wrote of before he died: he thought the al Qaeda brand had outlived its usefulness because it was always associated with violence and everyone completely neglected its political agenda. Now we see that al Qaeda has suddenly acquired this newfound mantle of moderation that I think is completely unjustified, but that people believe in. Because they don't use the name al Qaeda, these groups somehow become more tolerable in certain circles and more acceptable than they ever would have been before.

I don't think there are any quick solutions to terrorism. There's no one tactic or technique that's going to turn the tables. One of the things we always have to be thinking about is how our enemies may use what we do against us. At the end of the day, we have to break their power. That's the kinetic part, but there is also an enormously important nonkinetic element. I believe in both. The nonkinetic element is absolutely important in preventing a revitalization of these terrorist campaigns. Things that we do can play into their narratives, which they exploit very effectively to get new sources of support and new recruits. So part of a sound and solid counterterrorism strategy is to recognize that we need to avoid doing things that play into their narrative—that diminish our stature while enhancing theirs. ❖

NOTES

- 1 The Combating Terrorism Archive Project (CTAP) aims to collect and archive knowledge on strategy, operations, and tactics used by military and other security personnel from around the world in the twenty-first-century fight against global terrorism. Collectively, the individual interviews that CTAP conducts constitute an oral history archive of knowledge and experience in counterterrorism for the benefit of the CT community now and in the future.
- 2 This interview was edited for length and clarity. Every effort was made to ensure that the meaning and intention of the participants were not altered in any way. The ideas and opinions of all participants are theirs alone and do not represent the official positions of the US Naval Postgraduate School, the US Department of Defense, the US government, or any other official entity.
- 3 Bruce Hoffman, *Inside Terrorism*, 3rd ed. (New York: Columbia University Press, August 2017).
- 4 *Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction: Report to the President of the United States* (Washington, D.C.: Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, 31 March 2005): <http://govinfo.library.unt.edu/wmd/report/>
- 5 James R. Clapper, *Statement for the Record: Worldwide Threat Assessment of the US Intelligence Community* (Washington, D.C.: Senate Armed Services Committee, 9 February 2016): https://www.armed-services.senate.gov/imo/media/doc/Clapper_02-09-16.pdf
- 6 Adam Goldman and Eric Schmitt, "One by One, ISIS Social Media Experts Are Killed as Result of F.B.I. Program," *New York Times*, 24 November 2016: <https://www.nytimes.com/2016/11/24/world/middleeast/isis-recruiters-social-media.html>

ETHICS AND INSIGHTS

Honor and Truth

George Lober

OVER DINNER THE OTHER NIGHT, A FRIEND ASKED ME, IN LIGHT OF MY recent retirement, what I learned about the students I taught over the past 18 years—the majority of whom were military officers or civilians engaged in some form of counterinsurgency or counterterrorism activity across the globe. It was an interesting question, and one I admit I was reluctant to answer, partly because what I learned *about* my students is inseparable from what I learned *from* them—and what I learned from them is impossible to express casually over dinner. But the question hung in the air, so I muttered something deliberately opaque and changed the topic.

Later on, I thought about my reaction and the answer that I should have given. I should have said that, among other things, I learned that those men and women live lives of profound ethical contradictions, some of which cannot be reconciled. And if I was being completely honest, I would have added: Not the least contradictory is their relationship with Honor and Truth.

Let me offer two disparate examples of what I mean.

An overwhelming majority of the students I have taught cling to the role of the “silent professional” encouraged by their military or security-enforcement cultures. They keep secret the personal truths of their professional experience—what they know, what they have done, what they have witnessed—and they do so at times even at the risk of their reputations and careers.

As a case in point, imagine that you are one of the four students I taught who were directly involved in a mission that resulted in a highly publicized civilian death (or deaths), a mission that upon its completion quickly mushroomed beyond your control into an international incident. Imagine that during that mission, and preceding the civilian death, a host of unforeseen circumstances and general confusion erupted, so that despite your best efforts to follow protocol and the rules of engagement and to make the best possible decisions in an extraordinarily chaotic, stressful environment, the death occurred anyway. Then imagine that you report all of this to your chain of command, either immediately upon discovering the death or upon returning from the mission. You acknowledge everything that was in your control and everything that was not. You are absolutely truthful. And the truth is that there was no way you could have anticipated and prevented that death.

Nevertheless, as the public controversy over what happened grows, your competency comes into question, your reputation within your own organization becomes tarnished, and pressure grows from within and outside the organization to hold you accountable. Critics demand that you receive some form of disciplinary action, ranging from loss of position, to demotion, to denial of future promotion, to imprisonment if found guilty by either a civilian or military court. And although the decision your higher-ups eventually reach allows you

I LEARNED THAT
THOSE MEN AND
WOMEN LIVE LIVES
OF PROFOUND
ETHICAL
CONTRADICTIONS.

to remain within the organization, the news sources' incorrect conclusions regarding the incident travel across the globe. False information and rumor continue to be presented as fact. As a result, not only do your name and career incur further damage, but your personal relationships become strained.

In considering this situation, one question that strikes me is whether the moment ever arrives when you would consider speaking out publicly in your own defense to set the record straight. If you were among the four students I have taught who found themselves in similar circumstances, you would answer, "No."

As a point of honor, you would, in fact, choose to say nothing beyond what you reported through official channels. You would choose to shield your personal truth of what actually happened from public examination, keeping that knowledge private because of your commitment to being a "silent professional." Beyond official inquiry into the incident, you would share your story—your truth—with only an extremely small circle of highly trusted confidants. And you would hold to that commitment despite recurring invitations to defend yourself in public or to cash in financially by revealing your side of the story.

In that regard, by honoring your commitment to stoic silence, you would be no different from the overwhelming majority of the students I've taught: men and women who view with disapprobation those in their service communities who break ranks with the professional culture of silence and sell their stories—their personal truths—to publishers for profit. The majority of those I've taught perceive professional reticence as equivalent to honoring a promise—an indicator of one's ethical integrity.

Now imagine, in contrast, that you direct that same profound sense of honor toward communicating the truth. Imagine also that you work in an environment where you are challenged every day by a seemingly endless deluge of training and bureaucratic requirements that impede your ability to do the very best job you can. Imagine that these requirements obstruct your ability to accomplish your primary tasks, despite the fact that many of them—and sometimes it feels like most of them—are only tangentially related to your primary duties and responsibilities. How do you handle that situation? How do you cope with the unreasonable demands on your time and the unnecessary restrictions on your performance? Do you lie about accomplishing some of them? Do you communicate a falsehood by simply checking a box for a requirement you did not fulfill, or by slow-rolling an assigned task you deem unnecessary? Do you blow off some requirements or ignore impeding policies in order to do your job?

If you're among a considerable number of the students I have taught over the past 18 years, your answer to these questions is "Yes," and my inevitable response is "Why?"

Let me be clear: the vast majority of the hundreds of students who have been in my classes over the years have been noble men and women, both military and civilian, who fully embrace the concepts of honor and decency. They truly believe that their word is their bond and that living a life of integrity requires living as closely as possible to their core moral—and in some cases, religious—principles. In addition, many of them are graduates of military academies across the globe, and most of these academies share a similar honor code that shuns



**YOU WOULD CHOOSE
TO SHIELD YOUR
PERSONAL TRUTH
OF WHAT ACTUALLY
HAPPENED FROM
PUBLIC EXAMINATION.**



lying and espouses truth-telling. So why would these same individuals, who value their sense of honor and commitment highly enough to silently endure calumny on a searing scale, also violate their honor and commitment to the truth to negotiate an organizational bureaucracy?

The answer, I believe, is complicated and not entirely reconcilable. It begins with the fact that, if most of my students can find any general consensus around some positive aspect of lying and deceit, it comes when discussing the pressures involved in serving within an immense bureaucracy. Such pressures, they tell me, result from a constant stream of ever-increasing training requirements, restrictive policies, and leadership demands, which lead many of them to conclude that they have no choice but to occasionally deceive or lie so they can accomplish their primary mission. This assertion is borne out by the 2015 United States Army War College report by Leonard Wong and Stephen J. Gerras, *Lying to Ourselves*.¹ In it, the authors identify almost all the frustrations my students have expressed over the years and conclude that “untruthfulness is surprisingly common in the military” as the result of a burdensome environment of ever-increasing requirements and obstructive policies.²

As evidence, Wong and Gerras cite a 2002 analysis, which concluded that company commanders had to find ways “to fit 297 days of required training into 256 training days,” and a 2012 Inspector General’s report, which indicated that all 16 Army companies that were inspected as part of the Army Force Generation process were unable to complete all of the required training and tasks.³

Because of “the Army’s tendency toward zero defect,” however, the authors suggest that reporting any non-compliance was not then—and presumably is not now—a viable option.⁴ The authors contend that military leaders instead face a limited series of options, ranging from “hand-waving, fudging, massaging, or checking the box” to “evasion and deception.”⁵ As they firmly state, “in the routine performance of their duties as leaders and commanders, US Army officers lie.”⁶

The report further alleges that whether in garrison or downrange, soldiers are confronted with a flood of cumbersome bureaucratic requirements and potential ethical confrontations, which result in what Wong and Gerras

call *ethical fading*, whereby the “moral colors of an ethical decision fade into bleached hues that are void of moral implications.”⁷ Or in less poetic terms, “ethical fading allows us to convince ourselves that considerations of right or wrong are not applicable to decisions that in any other circumstances would be ethical dilemmas.”⁸

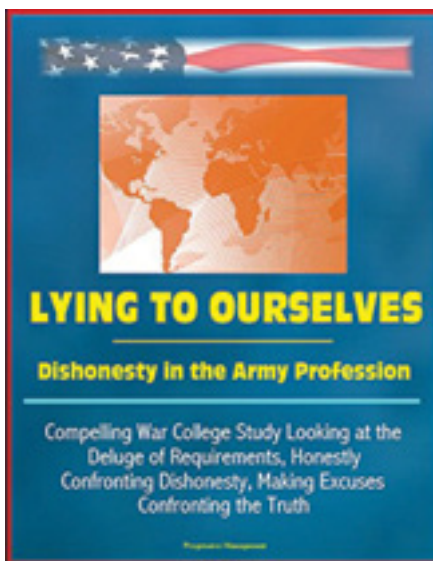
How does this ethical fading occur? The report argues that it occurs when expressions such as “checking the box,” “giving them what they want,” “prioritizing,” “accepting prudent risks,” and “good leadership” become justifications for deliberately resorting to falsehoods.⁹ Perhaps worse, however, the report suggests that the actual outcome for the perpetrators is an ethical *numbing*, a disengagement from the deceit generated by their signatures and false statements, and the rationalization that compromising one’s personal and professional honor is merely a “means to maneuver through the Army bureaucracy.”¹⁰

My “truth” is that nothing in the Army War College report surprises me, nor do I believe that the problems it identified are germane solely to the US Army. In my experience, the difficulties and issues that Wong and Gerras describe are common to many of my American students, regardless of their branch of service, and are shared by many of my international civilian and military students as well. What the report does not address, however, is the level of frustration that surfaces among my students as a result of being caught in such ethical binds. For some, the

ultimate consequence of feeling that if they are going to succeed professionally, they have little alternative but to compromise their integrity, is nothing less than a scarring cynicism—an outcome the philosopher Sissela Bok asserts “can have far reaching effects on both internal and external trust.”¹¹

So, on the one hand, many of the students I teach feel an absolute ethical imperative to honor their vow to protect the truth, while on the other hand they feel equally pressed at times to abandon their honor and commitment to the truth, due to the priorities of their current assignment, an unreasonable number of training requirements, and the burdensome bureaucratic environment in which they serve.

Thus I have learned that while many of them will sometimes forsake the truth and prevaricate, if not actually



lie, to circumvent the requirements and restrictions they perceive as “dumb” or “bullsh*t,” they will also shield and protect the truth of a specific experience at great emotional, social, and even professional cost to themselves—and they will do so as a point of honor.

How are these two perspectives on Honor and Truth reconcilable? Beyond a mutual inclination to protect or cloak the truth, I’m not sure they are. Nor am I sure they have to be. The philosopher Carl Ficarrotta might suggest that what I have learned about my students is that “perfectly ordinary human beings are capable of forming extremely complicated . . . dispositions,” and there is no psychological reason “to think we cannot form complex, context-sensitive moral dispositions.”¹² In other words, we are all capable of flipping certain internal ethical switches and acting according to different ethical codes depending on the situation and context.

It may be just as simple as that. It may be that untruthfulness and deceit become no big ethical deal when deployed as “work-arounds” to an impossible deluge of demands and restrictions—especially if the practice is both common and accepted. Wong and Gerras certainly suggest as much with their assertion that “much of the deception that occurs in the profession of arms is encouraged and sanctioned by the military institution.”¹³ Even so, I’m not so sure the answer is that cut-and-dried for my students. More than a few of them chafe at the need to flip such internal ethical switches, and many resent the

fact that their organizations put them in the position of having to compromise their personal honor and commitment to the truth for the sake of accomplishing their jobs, even if the practice is commonplace. The result for some, I believe, is an erosion of the truly altruistic values that drove them to serve in the first place; for others, it is a gradual transition into disillusionment and resigned acceptance.

THE EFFORT TO
LIVE AN ETHICALLY
CONSISTENT LIFE IS
AN UPHILL CLIMB.

In the end, I think what I have learned *about* my students and what I have learned *from* them is that they live in very ethically gray professional worlds where the dilemmas they face range across a complex spectrum, and the choices they make are not always consistent, much less reconcilable. The falsification of compliance require-

ments in one instance and the steadfast commitment to reticence and stoicism in another are but two examples of the military’s complex relationship with Honor and Truth. But I have learned that for the men and women I teach, the effort to live an ethically consistent life is an uphill climb—just as it is for everyone—and along the way, almost all of them are doing the best they can. ❖

ABOUT THE AUTHOR

George Lober retired in 2016, after teaching for 17 years at the US Naval Postgraduate School.

This is a work of the US federal government and is not subject to copyright protection in the United States. Foreign copyrights may apply.

NOTES

- 1 Leonard Wong and Stephen J. Gerras, *Lying to Ourselves: Dishonesty in the Army Profession* (Carlisle, Pa.: Strategic Studies Institute and US Army War College Press, February 2015): <http://www.strategicstudiesinstitute.army.mil/pdffiles/PUB1250.pdf>
- 2 Ibid., ix.
- 3 As cited in Wong and Gerras, *Lying to Ourselves*, 5.
- 4 Wong and Gerras, *Lying to Ourselves*.
- 5 Ibid., 8.
- 6 Ibid.
- 7 Ann E. Tenbrunsel and David M. Messick, “Ethical Fading: The Role of Self-Deception in Unethical Behavior,” *Social Justice Research* 17, no. 2 (June 2004): 224, as cited in Wong and Gerras, *Lying to Ourselves*, 31.

- 8 Wong and Gerras, *Lying to Ourselves*, 17.
- 9 Ibid., 18.
- 10 Ibid., ix.
- 11 Sissela Bok, *Lying: Moral Choice in Public and Private Life* (New York: Vintage, 1999), Kindle edition, chap. X.
- 12 J. Carl Ficarrotta, “Are Military Professionals Bound by a Higher Moral Standard?” (paper presented at the International Society of Military Ethics [formerly JSCOPE], 1998): <http://isme.tamu.edu/JSCOPE98/FICARROTTA98.HTM>
- 13 Wong and Gerras, *Lying to Ourselves*, ix.

THE WRITTEN WORD

Out of the Mountains: The Coming Age of the Urban Guerrilla

Reviewed by Fatih Celenay

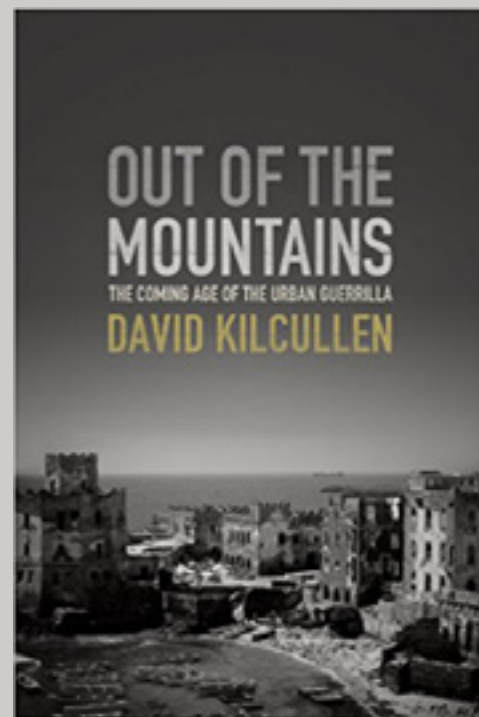
DAVID KILCULLEN, WHOSE BOOKS INCLUDE *THE ACCIDENTAL GUERRILLA: Fighting Small Wars in the Midst of a Big One* (Oxford University Press, 2009), *Counterinsurgency* (Oxford University Press, 2010), and *Blood Year: The Unraveling of Western Counterterrorism* (Oxford University Press, 2016), is a strategist and counterinsurgency expert. He served for 24 years as a soldier, diplomat, and policy advisor for the Australian and United States governments. Between 2007 and 2009, he was a special advisor to the US secretary of state and a senior advisor to General David Petraeus in Iraq.

In Out of the Mountains: The Coming Age of the Urban Guerrilla, Kilcullen uses a multi-disciplinary approach that includes urban design, human rights, diplomacy, community mapping, systems design, alternative energy, and rule of law, among others. He argues that four megatrends—population growth, urbanization, littoralization, and networked connectivity—will affect not only the issue of conflict but all aspects of life on the planet. Kilcullen's main argument focuses on the effects of the four megatrends on the nature of conflict and the urban environment.

These megatrends highlight significant changes that are taking place in urban life. Because urban populations in coastal regions are getting denser, more clandestine—or “dark”—networks, which control flows of people, money, goods, and information outside the government-regulated channels, are likely to emerge in these areas. These networks benefit from increasing connectivity and emerging communication technologies, and their potential dangers are also embedded in their highly-connected nature. Kilcullen uses the 2008 Mumbai terrorist attack, which was carried out by Lashkar-e-Taiba, a terrorist organization based in a mountainous region of Pakistan, to illustrate this point. He maintains that Lashkar-e-Taiba not only launched the most audacious maritime terrorist attack in India's history but also showed that, with the democratization of connectivity and technology, non-state actors like terrorist organizations can conduct appalling effective raids anywhere in the world.

Kilcullen then applies the four megatrends to a study of four megacities: Mogadishu, Somalia; Lagos, Nigeria; Kingston, Jamaica; and Mumbai, India. According to the UN's 2010 population report, the world's population will be over nine billion by 2050, and 75 percent of this population will be living in coastal cities. Kilcullen asserts that population growth, urbanization, and coastal density may lead to the rise of what some call “feral cities” all around the world. According to Richard Norton, a professor at the US Naval War College, a feral city is a metropolis with a population of more than one million people, in a state whose government cannot maintain the rule of law within the city's boundaries even though the state remains a functioning actor in the greater international system.

Kilcullen cites Kingston, Jamaica, as an example of a city with districts that are not fully controlled by the national government. Rapid population growth and unplanned urbanization, lack of governance capacity, youth unemployment,

*Out of the Mountains: The Coming Age of the Urban Guerrilla*

by David Kilcullen

New York: Oxford University Press, 2015

Paperback: US\$12.94

322 pages

and residential segregation are the main reasons for the city's problems. The Kingston neighborhood of Tivoli Gardens displays a hybrid internal/external pattern in which the Jamaican government and the non-state actors that control the district have a symbiotic relationship. Christopher Coke, a Kingston gangster who headed an international drug and weapons trafficking network called the "Shower Posse," tightly controlled Tivoli Gardens until his arrest in 2010. Coke's organization had a strong relationship with then-Prime Minister Bruce Golding, the leader of the Jamaica Labour Party (JLP), supporting the JLP in elections in return for government services. In 2010, however, the Jamaican government ended the relationship by launching a military operation against the Shower Posse.

The theory of competitive control is another important issue Kilcullen raises in *Out of the Mountains*. This theory says that whichever local armed actor the population perceives will be best able to establish a stable and predictable system of control is most likely to dominate the population and territory. The Shower Posse in Jamaica, the clan militias in Somalia, and the Taliban in Afghanistan are perfect examples of this theory: they tend to outcompete potential opponents and exert control over the local populations.

“THE 2011 UPRISINGS IN TUNISIA, EGYPT, LIBYA, AND SYRIA OFFER EXPLICIT EXAMPLES OF THE FUTURE OF GUERRILLA WARFARE AND TERRORISM.”

According to Kilcullen, most future conflicts will occur in urban areas. Military planners should therefore prepare the whole military system to fight in a densely populated, highly connected, littoralized urban area. The opposition forces will mostly be non-state actors. As a result, existing military doctrines and publications like FM 3-24, *Counterinsurgency*; FM 3-06, *Urban Operations*; and JP 3-26, *Counterterrorism*, need to be revised and updated according to the emerging needs of the urban battlefield.¹ The narratives of the 2011 uprisings in Tunisia, Egypt, Libya, and Syria are relevant to potential conflicts in different parts of the world because they offer explicit examples of the future of guerilla warfare and terrorism. What is more, virtual theaters, unmanned aerial vehicles, and cyber warfare—the components of remote warfare—will become increasingly important in the near future.

Kilcullen draws a clear picture of the future of guerilla and urban warfare. He defines the four megatrends by giving examples and statistics supported by scientific information and data analysis. For example, when he discusses population growth, he uses data from the UN Department of Economic and Social Affairs and several articles published in well-known journals and magazines to support his points.² He defines the littoralization megatrend based on sources such as the CIA's *World Factbook* and the United Nations Environment Program,³ while he draws his descriptions of non-state actors and the flow of their activities from the work of researchers like Sean Everton, who study these dark networks.⁴

The book has a very strong argument overall, but there are a couple of points that the author needs to clarify. First, forming a strategy against a military threat is a complex job. Kilcullen states that military planners have to consider the four megatrends and the nature of the threat together. The easy part of military strategizing is the description of the problem. The hard part is how to conceptualize the means to deter and defeat the enemy. The book offers good ideas for military planners, but it does not contain much information for field operators. In addition, Kilcullen does not give a persuasive answer to the question of why future conflicts will bypass rural areas. Even if an increasing number of conflicts emerge

in coastal megacities, that does not mean that future wars will occur mostly in these highly populated regions. Perhaps it would be better to say that the future of guerilla warfare will be a mixture of rural and urban conflicts.

The Afghanistan and Iraq wars show that not all wars and conflicts occur in littoralized or densely populated regions. Terrorist networks like al Shabaab, the PKK (the Kurdistan Workers' Party), and the Taliban still make extensive use of mountainous regions as safe heavens inside Somalia, Turkey, Iraq, and Afghanistan. They need these rugged terrains because, in most circumstances, it is safer for their fighters to be outside of urban areas during the training, preparation, and organization phases of operations. Because most countries' security and armed forces are located in urban areas, it would be unwise for a terrorist organization to choose an urban area as its base. When a state-run army faces a similar, conventional force, it is highly probable that the conflict will occur in densely populated areas. But when an army fights an unconventional force, fighting is likely to take place in both rural and urban areas. It seems clear to me that terrorist networks will continue to use rural areas for their operations in addition to the densely populated urban areas.

I see *Out of the Mountains* not as a set of solutions but as a description of important demographic changes, which can help people understand the changing environment of war and encourage them to think about new solutions to emerging trends. I highly recommend this book to anyone interested in insurgency and counterinsurgency studies. The traditional views of insurgency and counterinsurgency have been changing in recent years, and the four megatrends described by Kilcullen will have a profound effect on the future nature of war and insurgency. ♦

“
THE FOUR
MEGATRENDS
DESCRIBED BY
KILCULLEN WILL HAVE
A PROFOUND EFFECT
ON THE FUTURE
NATURE OF WAR
AND INSURGENCY.
”

ABOUT THE AUTHOR

Fatih Celenay is a former officer in the Turkish Army.

Copyright 2017, Fatih Celenay. The US federal government is granted for itself and others acting on its behalf in perpetuity a paid-up, nonexclusive, irrevocable worldwide license in this work to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the US federal government. All other rights are reserved by the copyright owner(s). Foreign copyrights may apply.

NOTES

- 1 Headquarters, Department of the Army, *Counterinsurgency*, FM 3-24 (Washington, D.C.: HQ, Department of the Army, 2006): <http://usacac.army.mil/cac2/Repository/Materials/COIN-FM3-24.pdf>; Headquarters, Department of the Army, *Urban Operations*, FM 3-06 (Washington, D.C.: HQ, Department of the Army, 2006): http://www.apd.army.mil/epubs/DR_pubs/DR_a/pdf/web/fm3_06.pdf; Chairman, Joint Chiefs of Staff, *Counterterrorism*, JP 3-26 (Washington, D.C.: CJCS, 2014): http://www.dtic.mil/doctrine/new_pubs/jp3_26.pdf
- 2 United Nations, *World Population Prospects: The 2010 Revision; Volume I: Comprehensive Tables* (New York: UN Department of Economic and Social Affairs, 2011): http://www.un.org/en/development/desa/population/publications/trends/population-prospects_2010_revision.shtml; “Concrete Jungles,” *Economist*, 29 September 2012: <http://www.economist.com/node/21563412>
- 3 Central Intelligence Agency, *The World Factbook* (Washington, D.C.: CIA, 2015): <https://www.cia.gov/library/publications/the-world-factbook/fields/2212.html>; United Nations Environment Programme, Urban Environment Unit, n.d.: http://hqweb.unep.org/urban_environment/issues/coastal_zones.asp
- 4 Sean F. Everton, *Disrupting Dark Networks*, Structural Analysis in the Social Sciences 34 (New York: Cambridge University Press, 2012).

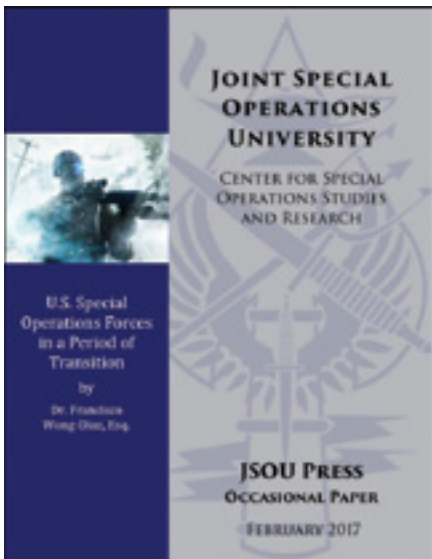
JSOU PUBLICATIONS

These recent JSOU Press publications are available electronically in the JSOU Press Publications 2016 and 2017 sections of the JSOU Library Management System: <https://jsou.libguides.com/jsoupublications>



Special Operations Forces as Change Agents by Jessica Glicken Turnley, Ph.D.

Dr. Turnley uses a cultural anthropologic lens to explore the socio-cultural aspects of the SOF community and their ability to perform as change agents. As the author explains in her introduction, “Well-positioned or particularly persuasive individuals from the SOF community have been able to use personal connections and social networks to catalyze and institutionalize change in a wide range of communities, stimulating individuals to coalesce around ideas presented through charismatic players.” Through the use of historical examples, such as the Office of Strategic Services (OSS) in World War II or the more recent Joint Special Operations Task Force–Philippines (JSOTF-P), Dr. Turnley guides the reader through explanations of organizational change and the modern day SOF operator who is creative and performs as a change agent within established bureaucracies. She arrives at the conclusion that, “SOF bring to the military the potential for change, realized through an ability to create, stimulate, and work through social networks and the power of individual personalities.”



U.S. Special Operations Forces in a Period of Transition by Dr. Francisco Wong-Diaz, Esq.

Dr. Wong-Diaz, an expert in international security law, looks at the effects of the post-Cold War strategic environment on SOF. After the fall of the Soviet Union in 1989, there was hope for a more peaceful world order. That changed after the shock of the 9/11 terrorist attacks. A resurgent Russia and a rising Communist China, along with failed states, humanitarian crises, and ungoverned spaces, creates a strategic security environment that is complex and dangerous. As former Chairman of the Joint Chiefs of Staff General Martin Dempsey once stated, “We now face multiple, simultaneous security challenges from traditional state actors and transregional networks of sub-state groups.” Dr. Wong-Diaz looks at the threats to US vital interests, our strategy for dealing with those threats, and our reliance on third offset technologies that are innovative, disruptive, and advantageous to the United States. He concludes with a look at the human dimension of SOF within USSOCOM and the global SOF network (GSN). The GSN strives for interoperability and is a key component of the indirect approach: an interoperable network of networks to achieve operational success.

Preventing Weapons of Mass Destruction Proliferation— Leveraging Special Operations Forces to Shape the Environment by Colonel Lonnie Carlson, Ph.D. and Margaret E. Kosal, Ph.D.

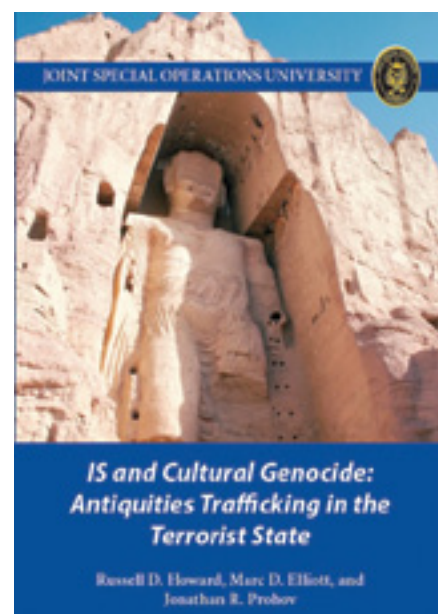
US Army Colonel Lonnie Carlson (Ph.D.) and Dr. Margaret Kosal argue that WMD expertise must be built within the SOF enterprise and that SOF must collaborate with government organizations (both US and partner nation) to conduct WMD counterproliferation-related building partnership capacity (BPC) and operational preparation of the environment (OPE) activities. The authors look at SOF attributes and assert that it is within the irregular warfare domain that SOF have the greatest opportunity to improve WMD counterproliferation effectiveness. The authors present a brief explanation of WMD classifications, present an inventory of countries that possess weapons-grade nuclear material, and graphically present the potential cost versus probability of use for WMD types. Colonel Carlson and Dr. Kosal conclude that the US government and Department of Defense must build and leverage the global SOF network through CWMD OPE and BPC activities. Those activities can lead to the early warning needed to mitigate fleeting opportunities to eliminate catastrophic WMD risks.



IS and Cultural Genocide: Antiquities Trafficking in the Terrorist State by Russell D. Howard, Marc D. Elliott, and Jonathan R. Prohov

In this monograph, the authors offer compelling research that reminds government and military officials of the moral, legal, and ethical dimensions of protecting cultural antiquities from looting and illegal trafficking. Internationally, states generally agree on the importance of protecting antiquities, art, and cultural property not only for their historical and artistic importance, but also because such property holds economic, political, and social value for nations and their peoples.

Protection is in the common interest because items or sites are linked to the common heritage of mankind. The authors make the point that a principle of international law asserts that cultural or natural elements of humanity's common heritage should be protected from exploitation and held in trust for future generations. The conflicts in Afghanistan, and especially in Iraq and Syria, coupled with the rise of the Islamic State (IS), have brought renewed attention to the plight of cultural heritage in the Middle East and throughout the world.



Cultural Intelligence for Special Forces Personnel by Russell D. Howard, Greta Hanson, and Carly Laywell

In a 2009 JSOU Press monograph reflecting on the education requirements for SOF personnel, Brigadier General Russ Howard (US Army, Ret.) identified "cultural competency" as critical to SOF professional development. He returns to this theme with researchers Greta Hanson and Carly Laywell by answering this question: why can some people act effectively in new cultures or among people with unfamiliar backgrounds, while others, even highly respected people within their own group, stumble in those same situations? The research team asserts that cultural intelligence (CQ) makes the difference and describes a proficiency that goes beyond simply being intelligent, emotionally mature, or having good general social skills. Their message to SOF is that a person with high CQ, whether cultivated or innate, can understand and master situations, persevere, and do the right thing.

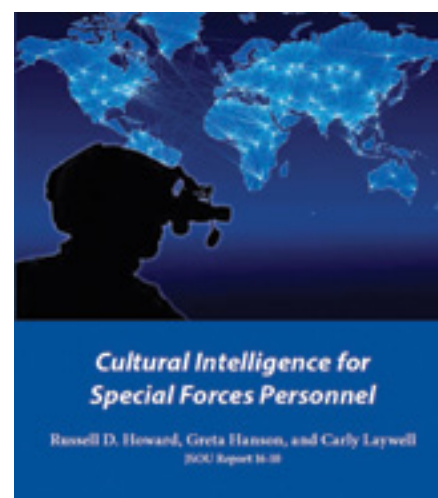


IMAGE CREDITS

Pages 8–9: All photos courtesy of the author.

Page 11: by D. R. Walker, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=243307>

Page 12: DoD photo by Sgt. Don L. Maes, US Marine Corps. This image was released by the United States Marine Corps with the ID 001029-M-0557M-011.

Page 14: (left) by Shoestring at wts wikivoyage, licensed under the Creative Commons Attribution-Share Alike 4.0 International, 3.0 Unported, 2.5 Generic, 2.0 Generic and 1.0 Generic license; (right) by Hannes Grobe, licensed under the Creative Commons Attribution 3.0 Unported license.

Page 15: (top) by Christian Ferrer / Wikimedia Commons / cc-by-sa-4.0; (left) by Christian Ferrer, licensed under the Creative Commons Attribution-Share Alike 3.0 Unported; (right) by David P. Howard, licensed under the Creative Commons Attribution-Share Alike 2.5 Generic license.

Pages 21–25: Various, fair use.

Page 34: (top) Public domain, <https://commons.wikimedia.org/w/index.php?curid=777885>; (middle) Public domain (government work), https://commons.wikimedia.org/wiki/File:David_koresh.jpg; (bottom) Public domain (government work), https://commons.wikimedia.org/wiki/File:Mugshot_of_Abu_Bakr_al-Baghdadi,_2004.jpg

Pages 39–44: Various, via manufacturers' sites.

Pages 52–55: by Vera Mironova, courtesy of the author.

Page 78: Public domain, Battle of Salmis. Painting by Wilhelm von Kaulbach.

CALL FOR SUBMISSIONS

The *Combating Terrorism Exchange* (CTX) is a quarterly peer-reviewed journal. We accept submissions of nearly any type, from anyone; however, submission does not guarantee publication. Our aim is to distribute high-quality analyses, opinions, and studies to military officers, government officials, and security and academic professionals in the counterterrorism community. We give priority to non-typical, insightful work and to topics concerning countries with the most pressing terrorism and CT issues.

Submission Guidelines

For detailed submission guidelines, go to www.GlobalECCO.org/journal/ and click on the “Submit to CTX” link.

CTX accepts the following types of submissions. Please observe the following length guidelines:

- **academic analyses** (up to 6,000 words)
- **reports or insightful stories from the field** (up to 5,000 words)
- **photographic essays**
- **video clips** with explanation or narration
- **interviews** with relevant figures (no longer than 15 minutes)
- **book reviews** (up to 2,000 words), review essays (up to 2,000 words), or lists of books of interest (which may include books in other languages)
- reports on any **special projects**

Submissions should be sent in original, workable format. (In other words, we must be able to edit your work in the format in which you send it to us: no PDFs, please.)

Submissions should be in English. Because we seek submissions from the global CT community, and especially look forward to work which will stir debate, *we will not reject* submissions outright simply because of poorly written English. However, we may ask you to have your submission re-edited before submitting again.

Ready to Submit?

By making a submission to CTX, you are acknowledging that your submission adheres to all of the submission requirements listed above, and that you agree to the CTX Terms of Copyright, so read them carefully.

Submit to
CTXSubmit@GlobalECCO.org

If you have questions about submissions, or anything else, contact
CTXEditor@GlobalECCO.org

Submission Requirements

Submissions to CTX must adhere to the following:

- The work must be copyedited for basic errors *prior to* submission.
- Citations should adhere to the *Chicago Manual of Style*. See the latest version at <http://www.chicagomanualofstyle.org/home.html>
- The work submitted may not be plagiarized in part or in whole.
- You must have consent from anyone whose pictures, videos, or statements you include in your work.
- You must agree to our Terms of Copyright.
- Include a byline as you would like it to appear and a short bio as you would like it to appear (we may use either, or both).
- Any kind of submission can be multimedia.

Terms of Copyright

Copyright © 2017. The copyright of all articles published in CTX rests with the author(s) of the article, unless otherwise noted. The *Combating Terrorism Exchange* (CTX) is a peer-reviewed, quarterly journal available free of charge to individuals and institutions. Copies of this journal and the articles contained herein may be printed or downloaded and redistributed for personal, research, or educational purposes free of charge and without permission, except if otherwise noted. Any commercial use of CTX or the articles published herein is expressly prohibited without the written consent of the copyright holder.



Battle of Salamis
by Wilhelm von Kaulbach